



11th International Conference on Advanced Manufacturing Technologies (ICAMaT 2020)
October 29th, 2020, Bucharest, Romania

ICAMaT 2020

**11th International Conference on Advanced
Manufacturing Technologies**

Conference Programme

October 29th, 2020
Online Conference - Bucharest, Romania



Organizer

Manufacturing Engineering (TCM) Department
Faculty of Industrial Engineering and Robotics (IIR),
University POLITEHNICA of Bucharest



Conference Programme

Thursday, 29th of October 2020

Time (RO)	Activities
10.00 – 10.15	ICAMaT 2020 opening – MS Teams – ICAMaT 2020 <i>Welcome speech:</i> <ul style="list-style-type: none">• Prof. Cristian DOICIN, Dean of the Faculty of Industrial Engineering and Robotics (IIR), POLITEHNICA University of Bucharest, Romania• Prof. Tom SAVU, Head of Manufacturing Engineering Department (TCM), Faculty of Industrial Engineering and Robotics (IIR), POLITEHNICA University of Bucharest, Romania• Lecturer Manuela-Roxana DIJMARESCU, Manufacturing Engineering Department (TCM), Faculty of Industrial Engineering and Robotics (IIR), POLITEHNICA University of Bucharest, Romania
10.15 – 12.15	Paper sections - session 1
12.15 – 12.30	Break
12.30 – 14.30	Paper sections - session 2



Conference Sections

Thursday, 29 th of October 2020, 10.15 -12.15 / 12.30 -14.30 (RO)	
Section 1	Product Development – Online on MS Teams platform (please access this link)
Section 2	Processes, Tools and Equipment - Online on MS Teams platform (please access this link)
Section 3	Industrial Systems - Online on MS Teams platform (please access this link)

Section 1. Product Development

Section.1. Product Development – online (please access this link)	
<i>Section chairs: Cristian Vasile DOICIN, Ivan SHATSKYI</i>	
1	Mădălina Dumitriu, Dorina Fologea and Ioan Cristian Cruceanu <i>Effects analysis of vertical track irregularities on bogie vibration - method based on bogie modelling and wheelsets accelerations measurement</i>
2	Dragoș Ionuț Stănică, Mădălina Dumitriu and Mihai Leu <i>The geometric filtering effect on ride comfort at railway vehicles</i>
3	Călin Rusu, Sorin Besoiu and Mihai Olimpiu Tătar <i>Design and closed-loop control of a piezoelectric actuator</i>
4	Ivan Shatskyi, Andrii Velychkovych, Ivan Vytvytskyi and Mykola Seniushkovych <i>Modeling of nonlinear properties of casing centralizers equipped with axial thrust</i>
5	Flavia-Petruța-Georgiana Artimon, Constantin Stochioiu, Horia Miron Gheorghiu and Iuliana Sima <i>Experimental characterisation of a flax fibre - epoxy resin composite</i>
6	Ruslan Puzyr, Volodymyr Kukhar, Tetiana Haikova, Roman Haikov and Olha Dolhikh <i>Mathematical modeling in the study of complex technical objects by the example of manufacturing vehicles wheel rims</i>
7	Elhocine Chiba, Mourad Abdelkrim, Abderrahim Belloufi and Imane Rezgui <i>Intelligent control of wheel rail contact noise phenomenon in rail transportation</i>
8	Mihaela Cristina Tudorache, Vlăduț Marian Dinu and Răzvan Andrei Oprea <i>Aspects of the wheel-switch contact studied with the CONTACT software</i>
9	Roman Murzac, Cristian Vasile Doicin, Mihaela Elena Ulmeanu and Teodor Țurcanu <i>Mathematical, detailed and parametric modelling for smart spinal orthoses</i>



Section 2. Processes, Tools and Equipment

Section.2. Processes, Tools and Equipment – online (please access this link)	
Section chairs: Abderrahim BELLOUFI, Manuela-Roxana DIJMĂRESCU	
1	Ana-Maria Mocioiu, Diana-Irinel Băilă and Oana-Cătălina Mocioiu <i>Chemical and mechanical tests on the SiO₂-ZnO materials for protective coatings of industrial use</i>
2	Oana-Cătălina Mocioiu, Diana-Irinel Băilă, Irina Atkinson, Veronica Brătan and Ana-Maria Mocioiu <i>Manufacturing of SiO₂-ZnO materials with optical properties</i>
3	Sergiu Mazuru and Serghei Scaticailov <i>The role of the friction process in abrasive grain micro cutting technology</i>
4	Sergiu Mazuru, Nicolai Trifan and Alexandru Mazuru <i>Some aspects of the nitriding process of parts in machine construction</i>
5	Volodymyr Kukhar, Elena Balalayeva, Maryna Korenko, Andrii Prysiashnyi and Oleksandr Anishchenko <i>FEM simulation of C45 steel and Cu-ETP billet shaping at hot upsetting between convex conical dies</i>
6	Ruslan Puzyr, Viktor Shchetynin, Roman Arhat, Yuliia Sira, Volodymyr Muravlov and Sergey Kravchenko <i>Numerical modeling of pipe parts of agricultural machinery expansion by stepped punches</i>
7	Liubomyr Ropyak, Vasyl Vytvytsyi, Andrii Velychkovych, Tetiana Pryhorovska and Maksim Shovkoplias <i>Study on grinding mode effect on external conical thread quality</i>
8	Tom Savu, Alexandru Sergiu Nanu and Ionuț Cosmin Ene <i>Automatic positioning methodology and algorithm for modular jigs and fixtures components</i>
9	Abderrahim Belloufi, Mourad Abdelkrim, Imane Rezgui, Rebai Saci, Mourad Mezoudj and Mohammed Toufik Amira <i>Optimal selection of milling cutting tools for machining of triangular pockets</i>
10	Mohammed Toufik Amira, Abderrahim Belloufi, Mourad Abdelkrim, Farid Abdelkrim and Mourad Mezoudj <i>Smart prediction of surface micro-hardness after milling based on fuzzy inference model</i>
11	Florina Ionescu, Gheorghe Solomon, Ionelia Voiculescu, Delia Gârleanu and Gabriel Gârleanu <i>Experimental study towards WIG welded joint. Case study: repair by welding of X2CrNiMo17-12-2 pipes</i>
12	Laurențiu Slătineanu, Margareta Coteață, Oana Dodun, Gheorghe Nagiț, Adelina Hrițuc and Irina Beșliu-Băncescu <i>Ways for determining the intermediate dimensions when designing the machining technology</i>
13	Daniel-Petru Ghencea, Florea-Dorel Anania and Miron Zapciu <i>Research of fuzzy logic application on surfaces roughness prediction under finishing milling process</i>



Section 3. Industrial Systems

Section.3. Industrial Systems – online (please access this link)	
Section chairs: Andrei DUMITRESCU, Predrag JANKOVIĆ	
1	Alexandra Elena Crăciun <i>Correlation between market segmentation, industrial product features and context in design assessment</i>
2	Andrei Dumitrescu and Mihail Purcărea <i>Product domestication from consumers perspective</i>
3	Georgiana Cătălina Neacșu, Iuliana Georgiana Pascu, Eduard Laurențiu Nițu and Ana Cornelia Gavriliuță <i>Brief review of methods and techniques used in Learning Factories in the context of Industry 4.0</i>
4	Iuliana-Georgiana Pascu, Georgiana Cătălina Neacșu, Eduard Laurențiu Nițu and Cornelia Ana Gavriliuță <i>A brief review of the methods and techniques used in the development of innovative internal logistics processes and systems</i>
5	Victor Bujakas and Maksim Glotov <i>New design of precise deployable reflector. Technologies for manufacturing of physical model</i>
6	Miloš Madić, Predrag Janković, Milan Trifunović and Marko Kovačević <i>Application of software solution for solving engineering design optimization problems</i>
7	Elizaveta Gromova <i>Model of «short cycles» as an integrated product development implementation in industry</i>
8	Alfred Tieber, Daniel-Silviu Manolache and Marian Gheorghe <i>Analysis and development of a key performance indicators model for the paper industry</i>