



9th International Conference on Advanced Manufacturing Technologies (ICAMaT 2018)
November 1st, 2018, Bucharest, Romania

ICAMaT 2018

**9th International Conference on Advanced
Manufacturing Technologies**

Conference Programme

**November 1st, 2018
Bucharest, Romania**



Organizers



Manufacturing Engineering (TCM) Department
Faculty of Engineering and Management of
Technological Systems (IMST),
University POLITEHNICA of Bucharest

and



Manufacturing and Industrial Management Department
Faculty of Mechanics and Technology
University of Pitesti



Conference Programme

Thursday, 1st of November 2018

Time	Activities
9.00 – 11.00	<p>Simpozionul Centenarul Marii Uniri - Oameni și fapte (Great Unification Centenary Symposium – People and facts) - IMST Faculty - Room CD 008 (The presentations will be held in Romanian)</p> <ul style="list-style-type: none"> • Conf.univ.dr. Florentina Nițu, Decanul Facultății de Istorie, Universitatea din București: <i>Universitarii bucureșteni și Marele Război (1914-1918) (Bucharest Academics and the Great War (1914-1918))</i> • Prof.univ.dr., Col. (r) Ion Giurcă, Universitatea Națională de Apărare „Carol I”: <i>Mareșalul Constantin Prezan – Doctor Honoris Causa al Școlii Politehnice din București (Marshal Constantin Prezan – Doctor Honoris Causa of the Polytechnic School of Bucharest)</i> • Dr. Remus Nică: <i>De la Unirea din 1918 la începutul celui de-Al Doilea Război Mondial. Premise și evoluții. (From 1918 Unification to the Beginning of the Second World War. Premises and evolution.)</i> • Liviu Țăranu, Consilier CNSAS: <i>1918 - Lecții pentru prezent (1918 – Lessons for the present)</i> • Dr. Alin Spănu: <i>1918 - Lumini și umbre(1918 - Lights and shadows)</i>
10.30 – 11.30	ICAMaT 2018 & POLCOM 2018 participants registration, IMST Faculty main hall, Building CD
11.30 – 13.00	<p>Opening ceremony of ICAMaT 2018 & POLCOM 2018 Conferences, Room CD 008</p> <p><i>Welcome speech:</i></p> <ul style="list-style-type: none"> • Prof. Cristian DOICIN, Dean of the Faculty of Engineering and Management of Technological Systems, University POLITEHNICA of Bucharest, Romania <p>Plenary sessions – Chairs: Prof. Tom SAVU, Prof. Constantin OPRAN</p> <ul style="list-style-type: none"> • <i>Romanian plastics industry - European level</i>, Marcel DIACONU, ASPAPLAST – Romanian Plastics Processor Employers’ Association • <i>The automotive industry in Romania, integration component plastics in automotive</i>, Silviu BADEA, ACAROM – Romanian Automobile Manufacturers Association • <i>Scientific research, creativity and integrative technology</i>, Prof. Marian GHEORGHE, University POLITEHNICA of Bucharest, Romania • <i>University research for supporting Industry 4.0 adoption</i>, Prof. Tom SAVU, University POLITEHNICA of Bucharest, Romania • <i>Numerical testing and validation of LVI on composite plates</i>, Prof. Giuseppe LAMANNA*, Prof. Francesco CAPUTO, University of Campania Luigi Vanvitelli, Aversa Italy • <i>"Liquid Wood" - The biodegradable material</i>, Prof. Dumitru NEDELCU*, Prof. Simona MAZURCHEVICI, "Gheorghe Asachi" Technical University of Iasi, Iasi, Romania • <i>Self Learning Health Monitoring Algorithm in Composite Structures</i>, Prof. Luigi GRASSIA*, Prof. America CALIFANO, Prof. Alberto D’AMORE, University of Campania Luigi Vanvitelli, Aversa Italy
13.30 – 14.30	Lunch – IMST Faculty CO hall
14.30 – 17.30	Paper sections according to the conference programme
19.30	Gala Dinner (POTCOAVA restaurant)



Sections

Thursday, 1st of November 2018, 14.30 -17.30

Section 1 | Product Design and Development - Room **CK 104c**

Section 2 | Manufacturing Processes and Tools - Room **CB 203**

Section 3 | Control, Quality and Management - Room **CK 104b**

Section.1. **Room CK 104c/ 14.30-17.30. Product Design and Development**

Section chairs: DOICIN Cristian, GHEORGHITA Vlad

- 1 Andrei Dumitrescu and Mihaela-Elena Ulmeanu
Chromatic Preferences for Industrially-Manufactured Products
- 2 Vlad Gheorghită and Cătălin Gheorghită
Determining the Material and Shape of Components within a System Attached to a Wheelchair
- 3 Dorina Fologea and Traian Mazilu
Rail Damper Functionality – Modelling and Experimental Determinations
- 4 Traian Mazilu and Mihai-Cornel Leu
On the Modelling of the Rail Joint
- 5 Madalina Dumitriu and Calin Constantin Juganaru
Numerical Analysis of the Vertical Bogie Accelerations at Failure of the Damper in the Primary Suspension of the Railway Vehicle
- 6 Madalina Dumitriu and Dragos Ionut Stanica
Influence of the Primary Suspension Damping on the Ride Comfort of Railway Vehicles
- 7 Gabriel Ionut Ghionea, Adrian Lucian Ghionea and Constantin Gheorghe Opran
Researches on the Design and Operation of a Magnetic Drive Micropump for the Mixing of Compatible Fluids
- 8 Mihaela-Elena Ulmeanu, Cristian-Vasile Doicin, Roman Murzac, Daniela Tunsoiu and Nicolae Tunsoiu
Product Development of a Bio-composite Medical Device
- 9 Rocsana Bucea-Manea-Țoniș and Ovidiu Blăjină
Factors Influencing Online Consumer Behavior in the Era of IoT



Section.2. **Room CB 203/14.30-17.30. Manufacturing Processes and Tools**

Section chairs: GHICULESCU Daniel, DIJMARESCU Manuela-Roxana

- 1 Khalil Abass
A Comparative Study of Simulation Models on Incremental Forming Process by Using the Enhancement Tools
- 2 Slawomir Swirad and Roman Wdowik
Applications of Taguchi Method in Selection of Process Parameters for Surface Roughness in Hydrostatics Burnishing
- 3 Abderrahim Belloufi, Mourad Abdelkrim, Imane Rezgui, Tarek Baafou Hammouya and Med Fares Eddin Boughaba
Fuzzy Inference System for Modelling Cutting Temperature of AISI 1060 Steel in Milling Operations
- 4 Dan Chiorescu, Esmeralda Ionela Chiorescu, Sergiu-Constantin Olaru and Gheorghe Nagiț
The Study of the Radius of Connection of the Die for Deep Drawing Using Analysis with Finite Element
- 5 Mourad Abdelkrim, Abderrahim Belloufi, Imane Rezgui, Gheorghe Brabie, Nicolae Tampu and Bogdan Chirita
Study of the Effect of Cutting Conditions on Cutting Temperature Elevation when Machining AISI 1060 Steel in Milling Operations Using Surface Response Methodology
- 6 Radu-Eugen Breaz and Sever-Gabriel Racz
Considerations Regarding the Industrial Implementation of Incremental Forming Process
- 7 Melania Tera and Cristina-Maria Biris
Comparison Between Deep-drawing and Incremental Forming Processes from an Environmental Point of View
- 8 Gheorghe Nagit, Laurentiu Slatineanu, Oana Dodun, Marius Ionut Ripanu, Andrei Mihalache, Mihai Boca and Adelina Hrituc
Influence of the Ball Vibrorolling Parameters on the Surface Roughness and on the Superficial Layer Hardness
- 9 Viorel Paunoiu, Florin Pereira, Virgil Teodor and Catalina Maier
Investigation of Hydroforming Technology for Manufacturing an Auto Complex Part
- 10 Manuela-Roxana Dijmărescu and Petre Gheorghe Tiriplică
Development of Cutting Forces and Surface Roughness Prediction Models for Turning a CoCrW_{Ni} Alloy
- 11 Mihai Crenganis and Akos Csiszar
A Dynamic Model for KUKA KR6 in SPIF Processes
- 12 Daniel Ghiculescu, Niculae Marinescu and Claudiu Pirnau
Experimenting and Modeling of Ultrasonically Aided Electrical Discharge Machining on Co-Cr-Ni-W-Al Alloy



Section.3. **Room CK104b/14.30-17.30. Control, Quality and Management**

Section chairs: GHEORGHE Marian, TARBA Cristian

- 1 Marek Magdziak and Dominika Ziaja
Software Dedicated to Determining a Strategy of Coordinate Measurements
- 2 Roman Wdowik and Slawomir Swirad
Application of Focus-Variation Technique in the Analysis of Ceramic Chips
- 3 Elizaveta Gromova
Introduction of Flexible Manufacturing Systems as a Necessary Measure for the Russian Industrial Development
- 4 Ana Gavriluta
The Analysis of a Production Flow with the Help of Value Stream Mapping
- 5 Cornel Enciu, Cristian Tarba and Cristian Barbulescu
Acoustic Analysis of Cylindrical, Conical and Worm Gears
- 6 Mihaela Badea, Maria Magdalena Roşu and Manuela-Roxana Dijmărescu
Students' Satisfaction Given by Following Bachelor Studies and Starting a Career in Engineering Field
- 7 Mihail Aurel Titu and Gheorghe Pop
Regarding Quality Management System in Aerospace Industry Organizations
- 8 Markus Moritz, Marian Gheorghe and Daniel-Silviu Manolache
A Holistic Performance Management Approach in Business Networks
- 9 Tom Savu
Data Processing for Ship Screw Propellers Measurements
- 10 Markus Moritz, Daniel Fuchs and Marian Gheorghe
Impact of Hidden Networks in Business Systems