



POLCOM 2023 - Conference Program
University Politehnica of Bucharest, University of Campania "Luigi Vanvitelli"

Thursday, November 23rd		
Room	Chairman	Speakers
09:00 - 11:00 Plenary Session UPB Room: CD008	Polcom Conference Opening <i>Chairs: prof. Constantin Opran prof. Giuseppe Lamanna</i>	Prof. Constantin Opran University Politehnica of Bucharest Prof. Giuseppe Lamanna University of Campania "Luigi Vanvitelli"
		Invited Speaker: Prof. Chiara Bertolin Norwegian University of Science and Technology <u>Numerical investigation on the compressive behaviours of Islamic geometric-pattern inspired architected material</u>
		Sidra Riaz Politecnico Di Bari, Italy <u>Numerical Simulation of Non-Destructive Thermography by means of Carrera Unified Formulation for Characterizing Delamination in Composite Materials</u>
		Michele Picariello University of Campania "Luigi Vanvitelli" <u>Digital Twin in SMEs: Implementing Advanced Digital Technologies for Engineering Advancements</u>
		Dr. Giuseppe Riva Federchimica-Plastics Europe Italia <u>The Plastic Transition Roadmap</u>
		Invited Speaker: Prof. Mihaela-Elena Ulmeanu University POLITEHNICA of Bucharest <u>Additive manufacturing applications in the medical industry</u>
		Dr. Victor Nastase Industry Director of Lubexpert Romania <u>Automatic grease guns: advantages and applications</u>
		Ileana Dugaescu University POLITEHNICA of Bucharest <u>Research Regarding the Design and Development of an Optimum Concept for a Humanoid Robot</u>
		Invited Speaker: Prof. Mihaela-Elena Ulmeanu University POLITEHNICA of Bucharest <u>Functional Analysis: A Case Study of an IoT-Based Health Monitoring System</u>
		Mihaela-Elena Ulmeanu University POLITEHNICA of Bucharest <u>3D Printing Strategy in Manufacturing of Health Monitoring Devices</u>
11:15 - 13:30 Plenary Session UPB Room: CD008	<i>Session Chairman: prof. Alessandro De Luca</i>	Invited Speaker: Dr. Donato Peretto University of Campania "Luigi Vanvitelli" <u>A Novel Intelligent System Based on Guided Waves for in-situ Structural Health Monitoring</u>
		Nurazima Ismail Universiti Malaysia Pahang <u>Structural health monitoring of the metallic plate using guided waves: An experimental study</u>
		Antonio Aversano University of Campania "Luigi Vanvitelli" <u>Experimental investigation for debonding detection in a reinforced CFRP panel through ultrasonic guided waves</u>
		Dan Nitoi University POLITEHNICA of Bucharest <u>Designing an ultrasonic system used to reduce the cross-linking time of epoxy resins used in the construction of brake cylinders</u>
		Anamaria Feier University POLITEHNICA of Timisoara, Romania <u>Optimization of a dissimilar joint through an additive manufacturing process</u>
		Catalina Enache University POLITEHNICA of Bucharest <u>Researches regarding realization of a drone using carbon fiber composite structures and additive manufacturing</u>
		Paschalis Charalampous Centre for Research and Technology Hellas - Information Technologies Institute (CERTH/ITI) <u>Patient-specific Investigation of Bileaflet Mechanical Heart Valve Prosthesis employing Additive Manufacturing Procedures and Numerical Simulations</u>
		Mario Munno University of Campania "Luigi Vanvitelli" <u>Machine Design</u>
		Ilie Nicolin INCAS - National Institute for Aerospace Research "Elie Carafoli" <u>Calculation the steering moment of friction for military training aircraft</u>
		Francesca Vassallo University of Campania "Luigi Vanvitelli" <u>Product Design Optimization Strategies for Metal Additive Manufacturing in Aerospace Applications</u>



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14:30 - 16:00 Plenary Session UPB Room: CD008	Session Chairman: prof. Giuseppe Lamanna
	<p>Nikolaos Kladovasilakis Centre for Research and Technology Hellas - Information Technologies Institute (CERTH/ITI), Greece <u>Development of a System for Repairing Damaged Tissue Utilizing 3D Printed Biodegradable Scaffolds and Computer Vision approaches</u></p>
	<p>Eleftheria Maria Pechlivani Centre for Research and Technology Hellas - Information Technologies Institute (CERTH/ITI), Greece <u>3D printed Impact Echo Device for Concrete Crack Detection</u></p>
	<p>Job Maveke Wambua Department of Mechanical and Construction Engineering, Northumbria University, Newcastle upon Tyne, United Kingdom <u>Effect of Turning Parameters on Cutting Forces, Maximum Principal Stress, and Maximum Interfacial Temperature on Medium Carbon AISI 1045 Steel: Simulation and Comparative Studies</u></p>
	<p>Alexandru-Ionut Nicolescu University POLITEHNICA of Bucharest <u>Dimensional and Weight Characterization of 3D Printed PET Specimens Designed for Compliant Mechanisms</u></p>
	<p>Marius-Vali Lazar University POLITEHNICA of Bucharest <u>Roughness regression functions of 3D printed PLA parts surfaces machined by CNC milling</u></p>
	<p>Cristin ZAHARIA University POLITEHNICA of Bucharest <u>Development of a polymer-metal hybrid mold for cold plastic deformation of stainless steel thin parts</u></p>
	<p>Sofia Milenkova University of Plovdiv "Paisii Hilendarski", Bulgaria <u>5-fluorouracil delivery systems based on chitosan microparticles and poly(lactic acid) film</u></p>
	<p>Elfrida Carstea National Institute of R&D for Optoelectronics INOE 2000 <u>Release of fluorescent organic matter by polystyrene in aquatic systems</u></p>
16:15 - 18:00 Plenary Session UPB Room: CD008	Session Chairman: prof. Donato Perfetto
	<p>Simona-Nicoleta Mazurchevic Gheorghe Asachi Technical University of Iasi, Romania <u>Improved surface quality with TiN-coated tool</u></p>
	<p>Ziyad Abdullah Middle Technical University/Institute of Technology-Baghdad <u>Remanufactured Solid Recovered Fuel Gasification based Bread Baking: Sustainable Business Opportunity Assessment</u></p>
	<p>JoannaBorowiecka-Jamrozek Kielce University of Technology <u>THE EFFECT OF ADDITION OF THE NATURAL ZEOLITE ON THE MICROSTRUCTURE AND MECHANICAL PROPERTIES OF SINTERED IRON MATRIX COMPOSITE</u></p>
	<p>Elisaveta Crăciun "Gheorghe Asachi" Technical University of Iasi, Romania <u>Determination of the friction coefficient magnitude in the case of polymer samples manufactured by 3D printing</u></p>
	<p>Andrea Sellitto University of Campania "Luigi Vanvitelli", Italy <u>A new FE Modelling approach to Simulate the Inter-Layer Adherence in Hybrid Sandwich Structures achievable by Additive Manufacturing</u></p>
	<p>Antonio Garofano University of Campania "Luigi Vanvitelli", Italy <u>Investigation on the Crashworthiness of a Composite Fuselage Barrel with Double-Double Designed Frames</u></p>
	<p>Miriam Battaglia University of Campania "Luigi Vanvitelli", Italy <u>Structural evaluation of a vertical tail for a supersonic vehicle: architecture, boundary conditions and material system influence</u></p>
	<p>Ciro Coscione University of Campania "Luigi Vanvitelli", Italy <u>Numerical simulation on the crack growth behaviour of Ti6Al4V under low cycle fatigue</u></p>