



POLCOM 2024 - Conference Program
National University of Science and Technology POLITEHNICA Bucharest
University of Campania "Luigi Vanvitelli"

Thursday, November 21st

Room	Chairman	Speakers
09:30 - 11:00	Plenary Session Central Library Room 4.1 4th floor	Polcom Conference Opening Chairs: <i>prof. Constantin G. Opran</i> <i>prof. Giuseppe Lamanna</i>
		Prof. Constantin G. Opran University Politehnica of Bucharest Prof. Giuseppe Lamanna University of Campania "Luigi Vanvitelli"
		Invited Speaker: Prof. Paul A. Tres ETS, Inc., Bloomfield Hills, Michigan, USA <u>Investigation of color on plastic product failure</u>
11:15 - 13:30	Plenary Session Central Library Room 4.1 4th floor	Session Chairman: <i>prof. Giuseppe Lamanna</i>
		Daniela Tunsoiu, Mihaela Ulmeanu National University of Science and Technology POLITEHNICA Bucharest, Romania <u>Automation of document management workflow for a higher education institution</u>
		Angela-Miruna Neacsu-Pavel, Mihaela Ulmeanu National University of Science and Technology POLITEHNICA Bucharest, Romania <u>Optimizing Cost and Value Through Technical Functional Analysis in the Development of a Humanoid Robot Concept</u>
		Dan Nitoi National University of Science and Technology POLITEHNICA Bucharest, Romania <u>Determining the quality of composite structures made in ultrasonic field by infrared thermal imaging</u>
		Ciupan CORNEL Technical University of Cluj-Napoca, Romania <u>Recyclable Composite Materials for the Upholstered Furniture Industry</u>
		Maria-Roxana Marinescu National Institute for Research and Dev. in Microtech. IMT-Bucharest, Romania <u>An adaptable 3D-printed model used for the production of monitoring devices of dog articulation health</u>
		Claudiu Florinel BISU National University of Science and Technology POLITEHNICA Bucharest, Romania <u>Stiffness characteristics identification in the case of industrial robot machining for wind blade composite material</u>
		Gheorghe Oancea Transilvania University of Brasov, Romania <u>Remanufacturing of damaged parts from an UAV</u>
		Théo EVRARD PIMM, France <u>MOISTURE AND TEMPERATURE AGEING ON HTPB BASED PROPELLANTS BINDER</u>
		Antonio Aversano University of Campania "Luigi Vanvitelli" <u>Guided wave based-SHM for complex thermoplastic composite flaperon</u>
		Amelia Felaco University of Campania "Luigi Vanvitelli" <u>Integrated Multibody Dynamics and Finite Element Analysis for Enhancing Fatigue Life in Agricultural Machinery</u>
		Antonio Pulverino University of Campania "Luigi Vanvitelli" <u>Stochastic finite element methodology aimed at localizing and classifying cracks through guided waves propagations</u>



POLCOM 2024 - Conference Program
National University of Science and Technology POLITEHNICA Bucharest
University of Campania "Luigi Vanvitelli"

Thursday, November 21st

Notes	Speakers
14:30 - 16:15 <i>Plenary Session</i> Central Library <u>Room 4.1 4th floor</u>	
	<p>Mihaela Feraru Ilie "Gheorghe Asachi" Technical University of Iasi, Romania <u>Surface quality of Cu-coated printed samples</u></p>
	<p>Sofia Milenkova "PAISII HILENDARSKI" UNIVERSITY OF PLOVDIV, Bulgaria <u>Comparison of native and modified biopolymer blends and their potential as sustained delivery system for Tolfenamic Acid</u></p>
	<p>Viola Veronica University of Campania "Luigi Vanvitelli", Italy <u>Sustainable Building Materials: Utilizing Wood Ash for CO₂ Sequestration</u></p>
	<p>Sabin Mihai National University of Science and Technology POLITEHNICA Bucharest, Romania <u>Corrosion behavior of high entropy alloy coated with Al₂O₃/SS304 composite using Laser melting deposition technique</u></p>
	<p>Petronela-Daniela Rusu Ostahie Gheorghe Asachi" Technical University of Iasi, Romania <u>Laser surface texturing of biodegradable polymers</u></p>
	<p>Irina Beşliu - Băncescu University Stefan cel Mare from Suceava, Romania <u>Evaluating Hole Accuracy and Surface Quality in Pine-Based Wood Polymer Composite generated by FDM Technology</u></p>
	<p>Raul-Mihai Petraşcu Lucian Blaga University of Sibiu, Romania <u>Joule Heating-Induced Self-Deformation of 3D-Printed Electrically Conductive PLA for Smart Gripping Applications</u></p>
	<p>Ciro Coscione University of Campania "Luigi Vanvitelli" <u>Fatigue analysis for crack propagation on Al6082-T6 CT specimen using XFEM method</u></p>
14:30 - 16:15 <i>Plenary Session</i> Central Library <u>Room 4.2 4th floor</u>	
	<p>Angela-Miruna Neacşu-Pavel, Nicolae Tunsoiu National University of Science and Technology POLITEHNICA Bucharest, Romania <u>Optimization of 3D Printing Parameters for the Fabrication of Kinematic Elements in Mono-Mobile Robot Design</u></p>
	<p>Donato Perfetto University of Campania "Luigi Vanvitelli" <u>Ultrasonic Guided Waves based SHM for delamination growth in LVI Impacted CFRP laminate</u></p>
	<p>Alexandru-Ionuţ Nicolescu, Vlad-Cristian Enache National University of Science and Technology POLITEHNICA Bucharest, Romania <u>Functional Parameters Analysis for Food 3D Printing</u></p>
	<p>Vasile Adrian Stoiculescu "Carol I" National Defense University, Romania <u>Lean Six Sigma Implementation in the Romanian Air Force: A Feasibility Assessment</u></p>

Michele Picariello
University of Campania "Luigi Vanvitelli", Italy
How AI can aim and reduce the annual amount of energy consumption in European SMEs

Cristian Giolu
National University of Science and Technology POLITEHNICA Bucharest, Romania
Feasibility Study of Polymer-Based Stamping Devices Manufactured via Material Extrusion Additive Manufacturing for Small-Batch Production and Prototyping

Adelina Hrițuc
Gheorghe Asachi" Technical University of Iasi, Romania
Bending Behavior of an Anisotropic Composite Polymeric Material Part

Adelina Hrițuc
Gheorghe Asachi" Technical University of Iasi, Romania
Buckling Behavior of Tubular Parts Made of Polylactic Acid

16:30 - 18:00 *Plenary Session*
Central Library
Room 4.1 4th floor

Session Chairman:
prof. Constantin G. Opran

Remus DOBRINOIU
National University of Science and Technology POLITEHNICA Bucharest, Romania
Modeling pedestrian flows between the Metro Station and the POLITEHNICA University for design a transfer system with moving walkways

Nicolae Tunsoiu, Andrei Staicu
National University of Science and Technology POLITEHNICA Bucharest, Romania
Optimization of Real-Time Monitoring and Control of Industrial Conveyor Systems Using Vision Automated Identification Methods

Luigi-Mădălin PEȚA
National University of Science and Technology POLITEHNICA Bucharest, Romania
Intelligent information system for optimizing production using energy from photovoltaic panels

Andreea Loredana Albu
National University of Science and Technology POLITEHNICA Bucharest, Romania
Eliminating polymer materials from the toy industry and replacing it with agro-materials obtained from corn-based

Constantin Alex Sumanariu
National University of Science and Technology POLITEHNICA Bucharest, Romania
Post irradiation analysis and comparison of additively manufactured and conventional stainless steel 316L samples

Serafim Muntean
Transilvania University of Brasov, Romania
Rapid prototyping process of aerodynamic components from an UAV

Andrei Dimitrescu
National University of Science and Technology POLITEHNICA Bucharest, Romania
Determination of the mechanical tensile characteristics of some 3D printed specimens from Nylon 12 Carbon Fiber material

Federico Barrino
University of Palermo, Italy
New food packaging material based on modified corn oil

Darya Nefedova
Polytechnic of Bari, Italy
Iron oxides on waste steel slags as catalyst for the transfer hydrogenation of nitrobenzene using iso-propanol as hydrogen source
