



**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	<i>Plenary Session</i> Central Library <b>Room 4.1 4th floor</b>	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	<i>Plenary Session</i> Central Library <b>Room 4.1 4th floor</b>	Session Chairmen: <i>prof. Giuseppe Lamanna</i> <i>prof. Alessandro De Luca</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>
		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 Polverino University of Campania "Luigi Vanvitelli" <u>Stochastic finite element methodology aimed at localizing and classifying cracks through guided waves propagations</u>
		Donato Perfetto University of Campania "Luigi Vanvitelli" <u>Ultrasonic Guided Waves based SHM for delamination growth in LVI Impacted CFRP laminate</u>

**PLEASE NOTE:**

Please note. The programme published on the conference website **does not constitute a record of the actual attendance of the authors.**

For further information, please contact the conference chairman.



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**Notes**

**Speakers**

14:30 - 16:15 *Parallel Session*  
**Central Library**  
**Room 4.1 4th floor**

Session Chairman:  
*prof. Alessandro De Luca*

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**Mihaela Feraru Ilie**  
"Gheorghe Asachi" Technical University of Iasi, Romania  
Surface quality of Cu-coated printed samples

**Sofia Milenkova**  
"PAISII HILENDARSKI" UNIVERSITY OF PLOVDIV, Bulgaria  
Comparison of native and modified biopolymer blends and their potential as sustained delivery system for Tolfenamic Acid

**Viola Veronica**  
University of Campania "Luigi Vanvitelli", Italy  
Sustainable Building Materials: Utilizing Wood Ash for CO<sub>2</sub> Sequestration

**Petronela-Daniela Rusu Ostahie**  
Gheorghe Asachi" Technical University of Iasi, Romania  
Laser surface texturing of biodegradable polymers

**Irina Beşliu - Băncescu**  
University Stefan cel Mare from Suceava, Romania  
Evaluating Hole Accuracy and Surface Quality in Pine-Based Wood Polymer Composite generated by FDM Technology

**Raul-Mihai Petraşcu**  
Lucian Blaga University of Sibiu, Romania  
Joule Heating-Induced Self-Deformation of 3D-Printed Electrically Conductive PLA for Smart Gripping Applications

**Ciro Coscione**  
University of Campania "Luigi Vanvitelli"  
Fatigue analysis for crack propagation on Al6082-T6 CT specimen using XFEM method

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

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

**Angela-Miruna Neacşu-Pavel, Nicolae Tunsoiu**  
National University of Science and Technology POLITEHNICA Bucharest, Romania  
Optimization of 3D Printing Parameters for the Fabrication of Kinematic Elements in Mono-Mobile Robot Design

**Alexandru-Ionuţ Nicolescu, Vlad-Cristian Enache**  
National University of Science and Technology POLITEHNICA Bucharest, Romania  
Functional Parameters Analysis for Food 3D Printing

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16:30 - 18:00

Plenary Session  
Central Library  
**Room 4.1 4th floor**

Session Chairman:  
*prof. Giuseppe Lamanna*

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**Sabin Mihai**

National University of Science and Technology POLITEHNICA Bucharest, Romania  
Corrosion behavior of high entropy alloy coated with Al<sub>2</sub>O<sub>3</sub>/SS304 composite using Laser melting deposition technique

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**Vasile Adrian Stoiculete, Răzvan HRIȚCU**

"Carol I" National Defense University, Romania  
Lean Six Sigma Implementation in the Romanian Air Force: A Feasibility Assessment

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**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

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**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

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**Luigi-Mădălin PEȚA**

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

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**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

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**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

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**Serafim Muntean**

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

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