



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

Thursday, November 23rd

Notes

Speakers

Sessions are scheduled  
from 9.30 a.m. to 5.30 p.m.

The presentation timetable  
will be available in a second stage

**Ziyad Abdullah**

Middle Technical University/Institute of Technology-Baghdad  
Remanufactured Solid Recovered Fuel Gasification based Bread Baking:  
Sustainable Business Opportunity Assessment

**Leonard Gabriel MITU**

University Transilvania din Brasov  
Elements of design and mechanical testing of "J" shaped prosthetic lamellae  
made of epoxy/carbon fiber layered bio-composite

**Elfrida Carstea**

National Institute of R&D for Optoelectronics INOE 2000  
Release of fluorescent organic matter by polystyrene in aquatic systems

**Ilie Nicolin**

INCAS - National Institute for Aerospace Research "Elie Carafoli"  
Calculation the steering moment of friction for military training aircraft

**Job Maveke Wambua**

Department of Mechanical and Construction Engineering, Northumbria University,  
Newcastle upon Tyne, United Kingdom  
Effect of Turning Parameters on Cutting Forces, Maximum Principal Stress, and  
Maximum Interfacial Temperature on Medium Carbon AISI 1045 Steel: Simulation  
and Comparative Studies

**Paschalis Charalampous**

Centre for Research and Technology Hellas - Information Technologies Institute  
(CERTH/ITI)  
Patient-specific Investigation of Bileaflet Mechanical Heart Valve Prosthesis  
employing Additive Manufacturing Procedures and Numerical Simulations

**Nurazima Ismail**

Universiti Malaysia Pahang  
Structural health monitoring of the metallic plate using guided waves: An  
experimental study

**JoannaBorowiecka-Jamrozek**

Kielce University of Technology  
THE EFFECT OF ADDITION OF THE NATURAL ZEOLITE ON THE MICROSTRUCTURE AND  
MECHANICAL PROPERTIES OF SINTERED IRON MATRIX COMPOSITE

**Ileana Dugaesescu**

University POLITEHNICA of Bucharest  
Research Regarding the Design and Development of an Optimum Concept for a  
Humanoid Robot

**Michele Picariello**

University of Campania "Luigi Vanvitelli"  
Digital Twin in SMEs: Implementing Advanced Digital Technologies for Engineering  
Advancements

**Sidra Riaz**

Politecnico Di Bari, Italy  
Numerical Simulation of Non-Destructive Thermography by means of Carrera  
Unified Formulation for Characterizing Delamination in Composite Materials

**Sofia Milenkova**

University of Plovdiv "Paisii Hilendarski", Bulgaria  
5-fluorouracil delivery systems based on chitosan microparticles and poly(lactic  
acid) film

**Adelina Hrituc**

"Gheorghe Asachi" Technical University of Iasi  
Sound isolation capacity of 3D printed plastic panel parts



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**Nikolaos Kladovasilakis**  
Centre for Research and Technology Hellas - Information Technologies Institute (CERTH/ITI), Greece  
Development of a System for Repairing Damaged Tissue Utilizing 3D Printed Biodegradable Scaffolds and Computer Vision approaches

**Alexandru-Ionut Nicolescu**  
University POLITEHNICA of Bucharest  
Dimensional and Weight Characterization of 3D Printed PET Specimens Designed for Compliant Mechanisms

**Eleftheria Maria Pechlivani**  
Centre for Research and Technology Hellas - Information Technologies Institute (CERTH/ITI), Greece  
3D printed Impact Echo Device for Concrete Crack Detection

**Marius-Vali Lazar**  
University POLITEHNICA of Bucharest  
Roughness regression functions of 3D printed PLA parts surfaces machined by CNC milling

**Cristin ZAHARIA**  
University POLITEHNICA of Bucharest  
Development of a polymer-metal hybrid mold for cold plastic deformation of stainless steel thin parts

**Michele Perrella**  
University of Napoli Federico II, Italy  
Epoxy-based nanocomposites containing sustainable fillers for the realization of DIC speckle patterns

**Dan Nitoi**  
University POLITEHNICA of Bucharest  
Designing an ultrasonic system used to reduce the cross-linking time of epoxy resins used in the construction of brake cylinders

**Bogdan Alexandru JUGRAVU**  
University POLITEHNICA of Bucharest  
Research on determining the position of autonomous industrial vehicles in factories for polymer products

**Ciro Coscione**  
University of Campania "Luigi Vanvitelli", Italy  
Numerical simulation on the crack growth behaviour of Ti6Al4V under low cycle fatigue

**Elisaveta Crăciun**  
"Gheorghe Asachi" Technical University of Iasi, Romania  
Determination of the friction coefficient magnitude in the case of polymer samples manufactured by 3D printing

**Anamaria Feier**  
University POLITEHNICA of Timisoara, Romania  
Optimization of a dissimilar joint through an additive manufacturing process

**Catalina Enache**  
University POLITEHNICA of Bucharest  
Researches regarding realization of a drone using carbon fiber composite structures and additive manufacturing

**Simona-Nicoleta Mazurchevici**  
Gheorghe Asachi Technical University of Iasi, Romania  
Improved surface quality with TiN-coated tool