



SAMM 2nd meeting

21st - 22nd OCTOBER 2021

SUSTAINABLE AND ADVANCED MANUFACTURING
 University of Aveiro · School of Design, Management
 and Production Technologies Northern Aveiro - ESAN
 Oliveira de Azeméis, Portugal

<http://sammeeting.web.ua.pt>

	21/out	22/out
09:00	Registration	
09:15		
09:30	Welcome	Keynote 3 - João Pedro Mendonça Universidade do Minho
09:45		
10:00	Keynote 1 - Vitor Martins Augusto NORCAM Engenharia e Design Industrial	
10:15		
10:30		Poster Pitch
10:45	Coffee-break	
11:00		
11:15	Presentation session 1 Innovations in manufacturing engineering	Coffee-break
11:30		
11:45	chairman: Hélder Puga, DEM - U. Minho	Presentation session 3 Machines, cyber-physical systems and automation
12:00		
12:15		chairman: Daniel Afonso, ESAN - U. Aveiro
12:30		
12:45		
13:00	Lunch-break	Lunch-break
13:15		
13:30		
13:45		
14:00	Keynote 2 - Jorge Lino Faculdade de Engenharia da Universidade do Porto	Keynote 4 - Alda Tomás Vista Alegre
14:15		
14:30		
14:45	Coffee-break	Coffee-break
15:00		
15:15	Presentation session 2 New materials and process optimization	Presentation session 4 Design and Innovation
15:30		
15:45	chairman: Martinho Oliveira, ESAN - U. Aveiro	chairwoman: Muriel Iten, ISQ
16:00		
16:15	Visit Stands and Labs	Ending session
16:30		
16:45	Social Event	
17:00		



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Keynote 1 - Vitor Martins Augusto
NORCAM Engenharia e
Design Industrial

O Futuro é hoje!

22/out

Keynote 3 - João Pedro Mendonça
Universidade do Minho

**PRODUTECH4S&C Digital Supply Chain
Challenges**

NextGen 3D, com Michael Machado

**INEDIT evolution to a smart cuisine
manufacturing**

Keynote 2 - Jorge Lino
Faculdade de Engenharia da
Universidade do Porto

Design of a metal tool for cutting tire burrs

Keynote 4 - Alda Tomás
Vista Alegre

Vista Alegre: Porcelana e Criação



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Presentation session 1
 Innovations in manufacturing engineering

João Sousa, João P. Mendonça, João Sarraipa

11:15 **ZDMP Introducing industry under Zero Defects
 Manufacturing concepts**

Renato Souza and Ricardo Torcato

11:30 **Mechanical characterization and study of cutting forces in
 the grinding process of crystal glass**

Mehran Mouziraji, Daniel Afonso and Ricardo Sousa

11:45 **Investigation of base layer geometry on the residual
 stress and mechanical properties of bulk LMD parts**

Isa Santos and Bruno Soares

12:00 **The influence of material extrusion printing parameters in
 geometric tolerancing**

Cristiano Alves, Fabio Fernandes and António Pereira

12:15 **Laser transmission welding of thermoplastics used in the
 automotive industry**

Presentation session 3
 Machine design, cyber-physical systems and
 automation

Tânia Nunes, Filipe Pereira and Carlos Felgueiras

**Remote connectivity devices - Study, tests and
 comparative analysis of performance**

Miguel Cruz and Hugo Faria

**Development of a CNC Control System for Desktop
 Filament Winding Equipment Using Visual Basic**

Helder Oliveira, Marco Duarte and Hugo Faria

**IDS Connectors as enablers of cyber physical systems in
 manufacturing industry**

Presentation session 2
 New materials and process optimization

Hélder Puga, José Grilo, Marco Amorim and Vitor Carneiro

15:15 **Dispersion of SiCp in A356 alloy melts using a hybrid
 ultrasonic stirring technique with ceramic sonotrodes**

Ricardo Alves de Sousa, Gabriel Serra, Fábio Fernandes
 and Eduardo Noronha

15:30 **Cork-STF composites: preliminary crashworthiness**

Luiza Melo de Lima, Tito Trindade and Martinho Oliveira

15:45 **Thermoplastic nanocomposites for applications in
 automotive industry**

Jorge Luis, Aline Santos, Paulo Lima, Martinho Oliveira,
 Jorge Marinheiro and Pedro Lemos

16:00 **Indirect Selective Laser Sintering of spray dried porcelain
 powders**

Presentation session 4
 Design and Innovation

Tiago Carvalho, Eduardo Noronha and Ricardo Sousa

**Integration of 3D printing technology in product
 development at PLM, Plural**

Maria João Amador, Eduardo Noronha and Ricardo Sousa
**Constraints to the use of recycled ocean polymers in
 electronic devices**

Henrique Takashi Idogava, Daniel Marcos Souza do Couto,
 Zilda de Castro Silveira and Fernando Jorge Lino Alves
Design of flexible components by additive manufacturing

Antonio Gomes and Augusto Sousa Coelho

**Sustainable development: Reuse of obsolete forging dies
 in the development of new products**

The logo for SAMM 2nd meeting, featuring the letters 'SAMM' in a stylized white font with a small orange dot, followed by '2nd meeting' in a white sans-serif font.

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Poster pitch session

Daniel Ferreira, Georgina Miranda, Filipe Oliveira and Martinho Oliveira

Time/cost-model for industrial large-scale production of 18Ni300 by Selective Laser Melting

Sílvio Abrantes, Sara P. Magalhães da Silva and José Martinho Oliveira

Development of Leather-Polymer Composites adapted for Additive Manufacturing

Carla Ferreira, Liliana Pires, Paulo Lima and Martinho Oliveira

Additive manufacturing of melt glass

João Pereira, Sara Silva and José Oliveira

Si₃N₄ based slurries for 3D stereolithography: a step into industrialization

Diana Carvalho, Sara Silva and José Oliveira

Cork-Polymer Composites based on Thermoplastic Starch for Additive Manufacturing

Filipe Martins, Laura Santos, Paulo Lima, Ricardo Torcato and José Oliveira

Influence of resin time degassing on the polyamide 6 properties

Hélder Morais, Ricardo Torcato and Paulo Lima

Design and manufacture of an instrumented injection mould for the flexible production of test specimens

Joana Lagarinhos, Simão Santos, Georgina Miranda, Daniel Afonso, Ricardo Torcato, Carlos Santos and Martinho Oliveira

The influence of surface finishing on laser heat treatments of a tool steel

Catarina Lemos, Daniel Afonso and Ricardo Torcato

LMD laboratorial equipment for strategy and parameter optimization

Loleny Tavares, Paulo Lima and José Oliveira

Characterization of bio-based and biodegradable materials for the production of automotive parts

Luiza Melo de Lima, Tito Trindade and José M. Oliveira

Poly(propylene)/graphene oxide nanocomposites: effect of compatibilizer and processing methodology on the thermal, mechanical, and morphological properties

Margarida Gonçalves, Helena Monteiro and Muriel Iten

Vehicle's Lightweight Materials - Environmental Performance Overview

João Laranjeira, Cristina Matos, Ana Rita Alberto and Carla Figueiredo Martins

Innovative approaches for risk management in nanotechnologies

Safe by Design and Safe and Sustainable by Design approaches

Helena Monteiro and Bruna Moura

Life cycle energy and carbon analysis of Rosemary aromatic extracts

Bruna Moura and Helena Monteiro

Embodied energy of colorant extraction processes from Roselle