

## Poster Session

<b>Behnam Dashtbozorg</b>	Enhanced Wettability of E-glass fibres through Active-screen Plasma Functionalisation
<b>Amber Heyndrickx</b>	Production of Multi-material Parts for Medical Applications, Considering the Bonding and Adhesion Strength of Deposited Materials by use of the Freeforming Additive Manufacturing Technology
<b>Daniel V. A. Ceretti</b>	Synergy Between Nanoparticles in ABS (nano)composites for 3D Printing: Microscopical Features and Rheological Properties
<b>Daniel V. A. Ceretti</b>	The Influence of the Filament Manufacturing Technique on the Degradation, Mechanical Properties, and Dispersion state of ABS-graphene Printed Nanocomposites
<b>Tanja Kosanovic</b>	Effect of Recycling Cycles on Physical/Chemical and Mechanical Properties of TX1501 Reinforced by sCFs
<b>Belén Pepió Tàrrega</b>	Improvement of the Compatibility and Recyclability of Carbon Fibre Reinforced Thermoplastics (Repair3D project)
<b>Papadopoulos Ioannis</b>	Design, Installation and Operation of a Pilot Fibre Sizing Line
<b>S. Soulis</b>	Investigating Electrochemical Treatment of Carbon Fiber Composites as a Possible Recycling Technique
<b>Stella Kalantzi</b>	Antimicrobial Assessment of Thermoplastics enhanced with Ag Nanoparticles for Critical Medical Consumables Applications
<b>Ruben Vande Ryse</b>	Tribometer Development for Polymer-based Horse Shoes Abrasion Mimicking

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Universidade do Minho



## 2<sup>nd</sup> International Conference on Polymer Process Innovation

15-16 | September | 2022

Lavrion Technological  
Cultural Park Athens | Greece

Organized by

R-NANO



Day 1   15.09.2022		
TIME (CET +1)		Mihanourgio Hall
9:00	9:20	Registration
9:20	9:40	Welcome by EADIP LTCP Vice president prof. Dimitris Kaliampakos and Rnano Director prof. Costas Charitidis
Session		Developments in polymer processing
9:40	10:00	The Influence of the Blending Ratio of PP/HDPE on the (Re)processability of Contaminated PP/HDPE Blends, <i>Ludwig Cardon</i>
10:00	10:20	The effect of graphene on the cross-linking process of EPDM and the properties of the obtained elastomers, <i>Panayotis Ketikis</i>
10:20	10:40	Developing a Feedstock for the Fused Filament Fabrication (FFF) of Aluminium, <i>Vahid Momeni</i>
10:40	11:00	Water-assisted injection moulding for the production of multi-tubular parts with different lengths, <i>Hugo Rodrigues</i>
11:00	11:40	Coffee Break / Poster Session
Session		Sustainable use of polymers
11:40	12:00	Valorization of low molecular weight PBS via a solvent-free vitrimerization process, <i>Christos Panagiotopoulos</i>
12:00	12:20	Occupational risk management of engineered nanomaterials: A carbon fibre sizing pilot line case study, <i>Spyridon Damilos</i>
12:20	12:40	Validation of the quality of PETg parts, produced via extrusion-based fused filament fabrication (FFF) at different printing temperatures and printing speeds, with evaluation of the recyclability aspect of the material, <i>Lynn Trossaert</i>
12:40	13:00	Degradation of bio-based polyesters exposed to thermo-mechanical loading in the molten state, <i>Ineke Velghe</i>
13:00	13:20	Sustainable implementation of industrial rubber waste recycling: chemical and thermo-mechanical joining for a selective devulcanization, <i>Jenny Pastore</i>
13:20	14:20	Lunch Break
Session		Trends in product development
14:20	14:40	Hybrid Process: a methodology and case-study, combining additive manufacturing with injection moulding, <i>Catia Silva</i>
14:40	15:00	Developing polymeric low-pressure hydrogen storage tanks for mobile applications, <i>Jyothisna Surisetty</i>
15:00	15:20	Thermal optimization of electronic enclosures developing new additively manufactured heat sinks, <i>Eva Silva</i>
15:20	15:40	Laser transmission welding evaluation of an automotive multi-purpose instrument panels, <i>Fernando Duarte</i>
15:40	16:00	Continuous carbon fiber composites produced by additive manufacturing: electromagnetic shielding case study, <i>Luis Martins</i>
16:00	17:00	Transportation to Posidon Temple
17:00	18:00	Posidon Visit
18:00	18:20	Transportation to Syrtaki Restaurant - Dinner



Day 2 16.09.2022		
TIME (CET +1)		Mihanourgio Hall
9:00	9:20	Registration
Session		Additive manufacturing
9:20	9:40	Comparing FFF and DPAM for composite specimens, <i>Marah Baddour</i>
9:40	10:00	Influence of 3D printing parameters on PLA's morphing ability: from design of experiments to practical work, <i>Mylene Cadete</i>
10:00	10:20	Enhancement of circularity in Additive Manufacturing via HP Multi Jet Fusion Technology, <i>Chiara Fiorillo</i>
10:20	10:40	The use of additive manufacturing in development solutions for lower limb dysmetria, <i>Alvaro Sampaio</i>
10:40	11:00	Development and production of robot end-effectors by Selective Laser Sintering technology, <i>Ana C. Lopes</i>
11:00	11:40	Coffee Break / Poster Session
Session		Moulds and mould making innovations
11:40	12:00	Surface Engineering Enabled Plastic Mould Innovations, <i>Hanshan Dong</i>
12:00	12:20	Dimensional and mechanical quality of ABS parts produced via FFF and injection moulding in a steel and an AM mould, <i>Ellen Fernandez</i>
12:20	12:40	Friction and adhesion force measurements using different materials for the tool material, <i>Ángela R. Rodrigues</i>
12:40	13:00	Microstructured surfaces replication using injection molding and compression molding processes, <i>Antonio Pontes</i>
13:00	13:20	Time and cost comparison of conventional and hybrid moulds for the injection of heatsink parts, <i>Sérgio J. Rodrigues</i>
13:20	14:20	Lunch Break
Session		Developments in polymer processing
14:20	14:40	Is the impact of degradation during processing of fused filament fabricated and injection moulded PETG different or not?, <i>Hannelore Ohnmacht</i>
14:40	15:00	Photoluminescent Polyethylene -Eu(DBM) <sub>3</sub> Phen and -Tb(Sal) <sub>3</sub> composites filament fabrication and characterization, <i>Laura Prior</i>
15:00	15:20	Influence of the rib geometry in the mechanical properties of PMMA/PC+ABS laser transmission welded parts, <i>Carla Martins</i>
15:20	15:40	Effect of MicroPlasma Modification on the Surface Properties of Glass Fibre Reinforced Polyamide 6 (GFPA6), <i>Chang Che</i>
15:40	16:20	Coffee Break / Poster Session
Session		Polymer processing simulation
16:20	16:40	Simulation based determination of the maximum flow rate in fused filament fabrication, <i>Tom Van Waeleghem</i>
16:40	17:00	Mass transfer phenomena in reinforced polymeric composites: modeling approaches and numerical simulation, <i>Luca Bergamasco</i>
17:00	17:20	The effects of unidirectional magnetic fields on ferromagnetic fibers in stagnant and flowing polymers, <i>Cédric De Schryver</i>
17:20	17:40	Upgrading theoretical models for understanding selective laser sintering parameters for polymeric materials, <i>Ruben Vande Ryse</i>