

Internships at LEPAMAP-PRODIS

Summer 2025; Restricted to UdG students

Enhancement of mechanical properties of molded pulp

Background: Join our cutting-edge research team in collaboration with HP's 3D printing unit in Sant Cugat del Vallès. We are seeking an innovative and dedicated intern to contribute to a groundbreaking project focused on enhancing the mechanical properties of molded pulp for packaging applications.

Project description: This internship involves developing novel pulp formulations and integrating enzyme-assisted technologies to create superior molded pulp products. The selected intern will be involved in:

- Implementing enzyme-assisted processes for pulp modification (pilot scale).
- Designing and producing molds for pulp casting (advanced HP's own technology).
- Optimizing dewatering and drying of molded pulp products through pulp modification and mold adjustments.
- Producing and testing the final molded pulp products.

Required skills and/or qualifications:

- Bachelor's students in Chemical Engineering, Mechanical Engineering or Industrial Engineering.
- Master students in Industrial Engineering.
- Interest in sustainable materials, green technologies, and computational fluid dynamics.
- Willingness to perform hands-on experiments in laboratories and pilot plants.

Remuneration: 8 €/h

Dedication: 350 h

Positions: 1

Sponsored by:



Validation of residual thermoplastics in 3D printing

Background: In collaboration with Cashkeeper, our research team is excited to offer an internship opportunity focused on the sustainable use of residual thermoplastics in 3D printing technologies.

Project description: The project aims to evaluate and validate the use of residual thermoplastic materials from Cashkeeper in 3D printing applications. Responsibilities include:

- Collecting and characterizing residual thermoplastic materials.
- Assessing the feasibility of extruding these materials into standard FDM filaments.
- Testing the performance of the produced filaments in FDM 3D printing processes.

Required skills and/or qualifications:

- Bachelor's students in Chemical Engineering, Mechanical Engineering or Industrial Engineering.
- Master students in Industrial Engineering.
- Interest in sustainable materials, green technologies, and additive manufacturing.
- Willingness to perform hands-on experiments.

Remuneration: 8 €/h

Dedication: 600 h

Positions: 1

Sponsored by:



Internship at LEPAMAP-PRODIs

Background: Join the dynamic LEPAMAP-PRODIs team at the University of Girona (UdG) to engage in transformative research and development related to sustainable materials. This internship is hosted at the LEPAMAP-PRODIs research group's laboratories and pilot plants, offering a unique opportunity to contribute to leading-edge projects.

Project description: The selected candidates will have the opportunity to actively participate in supporting the diverse initiatives of LEPAMAP-PRODIs, focusing on:

- Nanocellulose production, characterization, and its various applications.
- Development and testing of composite materials and advanced rheology modifiers.
- Innovative papermaking techniques and sustainability practices.
- Valorization of industrial residues for new uses in sustainable product designs.
- Application of circular economy principles to industrial processes and materials engineering.
- Development of novel polysaccharide-based materials.

Required skills and/or qualifications:

- Bachelor's students in Chemical Engineering, Mechanical Engineering or Industrial Engineering.
- Master students in Industrial Engineering.
- Interest in sustainable materials, green technologies, industrial processes, circular economy and bioeconomy.
- Willingness to perform hands-on experiments.

Remuneration: 8 €/h

Dedication: 350 h

Positions: 2