BUTTERFLIES Project

Bio-Polymers & Additive Manufacturing

Newsletter I

Advanced biopolymer-based manufacturing techniques

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Advanced biopolymer-based manufacturing techniques

To date, the BUTTERFLIES project has successfully completed Work Package 1, which is critical as it sets the scene for the project execution and delivery through establishing a strong foundation for advanced biopolymer-based manufacturing techniques. WP1 focused on defining material, process, and product specifications for two innovative applications: a biodegradable thumb orthosis and a chitosan-based organoid scaffold through advanced additive manufacturing technologies. Key achievements include capturing industrial requirements, outlining digital data strategies for process monitoring, and aligning technical development with business and operational KPIs.

The project emphasises sustainability, aiming to replace conventional materials with biodegradable alternatives and reduce environmental impact through circular economy principles. Future plans involve transitioning from specification to experimental validation, optimising manufacturing processes, and scaling up production for real-world applications. Aspirations for the coming months include advancing prototype development, conducting rigorous testing for safety and performance, and preparing for regulatory compliance and market readiness.

Thank you for following our journey. Stay tuned for more updates as we continue to innovate and deliver sustainable solutions for healthcare and beyond.

