BIO-UPTAKE

Welcome to the 8th and final newsletter of the Bio-Uptake project.

As the project comes to an end, this edition highlights the latest activities and achievements of the consortium. We first look back at the partners' participation in the EUBCE 2026 congress, which provided a valuable opportunity to organize the final consortium meeting, present the project's final results, and showcase the semi-products and materials developed throughout the project to a wider audience.

In this newsletter, you will also discover a selection of ongoing European projects involving Bio-Uptake partners, offering new opportunities for collaboration and continued innovation. Readers interested in these initiatives will be able to follow the partners' latest activities and connect with them directly.

Finally, this last edition will present some of the current expertise, capabilities, and future needs of the partners, opening the door to potential collaborations in upcoming European projects.

We hope you enjoy reading this final newsletter and thank you for following the Bio-Uptake journey.

www.bio-uptake-project.eu

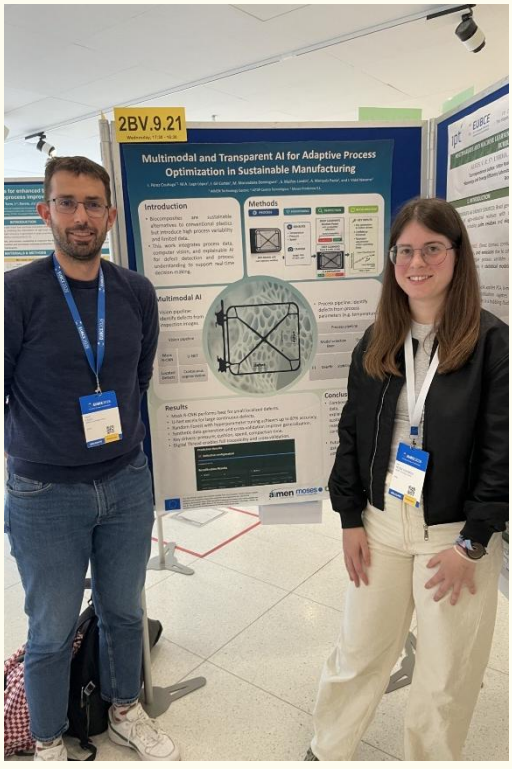
FINAL EVENT AT EUBCE

The Bio-Uptake consortium gathered during the EUBCE 2026 congress for the project's final event and consortium meeting. This important occasion brought together project partners to review the main achievements and outcomes developed throughout the project while strengthening discussions around future collaboration opportunities in the bio-based sector.

The event also provided an excellent opportunity to showcase the semi-products and innovative materials developed within Bio-Uptake to a broader audience attending the congress. In addition, the project's objectives, activities, and final results were presented during a dedicated session, highlighting the impact and contribution of Bio-Uptake toward more sustainable and circular bio-based value chains.

AIMEN also presented a poster focused on digitalization and process optimization approaches developed within the project, demonstrating how advanced digital tools can support more efficient and sustainable industrial processes.

The participation in EUBCE 2026 marked an important milestone for the consortium and offered valuable visibility for the results achieved during the Bio-Uptake project.



WHERE TO FIND US AND FURTHER COLLABORATION

Below, you will find an overview of the Bio-Uptake project partners, including their main areas of expertise and links to their websites for further information and potential contact opportunities.

You will also discover a selection of ongoing European projects related to topics addressed within Bio-Uptake, in which several consortium partners continue to be actively involved. These initiatives highlight the continuation of research, innovation, and collaboration efforts beyond the lifetime of the project.

Finally, this section presents some of the current expertise, technological capabilities, and future needs identified by the partners, opening the door to new collaborations and future opportunities within upcoming European projects and initiatives.

CENTEXBEL

Centexbel (BE) is a research organisation for textiles, plastics and composites. They will develop biobased filaments on pilot scale that will be used in the self-reinforced composites.

COMFIL

COMFIL® (DK) a SME with more than 30 years of experience in research, development and manufacture of thermoplastic composite materials, such as hybrid yarns, fabrics, organo-sheets and more.
COMFIL® will provide its expertise in these fields and manufacture demonstrator.

AITIIP

Aitiip is a technology centre highly specialised in plastics processing and mould manufacturing. Aitiip provides technological knowledge to companies to improve their competitiveness and strengthen their innovation and development capabilities. To this aim, Aitiip has participated in more than 140 R&D&I public funded projects in the last 20 years, heavily focused on green transition and circular economy, new materials and recycling processes, advanced manufacturing, industry 4.0 and robotics.
Within Bio-Uptake project, Aitiip will lead the management and demonstration packages of innovative production systems for bio-based materials and products…

AIMEN

AIMEN Technology Centre, with more than 50 years of history, is currently a national and European benchmark in research, development and technological innovation in the areas of advanced manufacturing and laser manufacturing, digital technologies for manufacturing, smart materials, smart systems and recycling; as well as in the provision of differentiating technological services to the industry in the areas of manufacturing with advanced joining technologies, robotics and process digitization, a flexible cross-engineering service highly specialised in welding, corrosion, equipment calculation, product simulation and material tests. Within Bio-Uptake project, AIMEN will lead the developments related to digital systems and interoperability and will participate in the Data analytics works.

CIDETEC

Cidetec Surface Engineering Institute is a key international player in research and innovation related to surface engineering and polymeric and composite materials. We specialise in processing surfaces and materials through disruptive technologies, ultimately aiming at technological transfer that will ensure the right solution for each customer. CIDETEC's role in BIOUTAKE will be focused on the development of biobased "enduring prepregs" based on its own patented 3R technology.

IRIS

IRIS Technology is Europe's leading engineering company in the manufacture and integration of turnkey photonics and artificial intelligence solutions. We provide real-time monitoring solutions with NIR technology, Raman spectroscopy, hyperspectral technology and machine vision for the food, pharmaceutical, chemical, plastics and wood industries, among others. Within BioUptake, IRIS will develop different advanced solutions for the inline monitoring of key performance parameters in three bio-based manufacturing processes.

MOSES

Moses Productos is a spin off of Aitiip Technology Centre, specialized in advanced manufacturing process, integral design and development of sustainable plastic. Moses is equipped with all the plastic transformation technologies such as injection, rotational molding, blow molding, thermoforming, injection blow molding, extrusion blow molding and sheet extrusion. Within Bio-Uptake project, Moses will develop one of the three demonstrators of the project: lid for garbage container.For this, he superimposes bioPA and carbon fiber composite pellets onto PLA organosheets with a reversible adhesive.

PODCOMP

Podcomp is one of Sweden's largest composite manufacturers. Our main market is the construction sector and the largest product is bathroom modules. These are produced in series production, with a capacity of ~ 2500 bathrooms annually. Podcomp is involved in R&D both internal development and national and international research projects. In BioUptake Podcomp will develop one of the three demonstrators of the project: Ceiling for bathroom modules based on smart pre-preg composites, consisting of bioepoxy and flax, and produced by thermoset thermoforming.. The materials as well as the manufacturing method will be developed in the BioUptake Project.

POLYMERIS

Dissemination and valorization of the results will be performed by **Polymeris** (FR), a cluster with a large EU network in the field of polymers and composites for various industrial sectors.

SIMCON France

Simcon France is a company specialized in the field of polymer processing simulation for injection molding, thermoforming, and blow molding processes. – Will oversee the simulations of the various shaping processes.

SPECIFIC POLYMERS

SPECIFIC POLYMERS is a French SME with 30 employees specialized in the custom design of polymers and innovative materials for academic and industrial research.
Green materials, sustainable chemistry and biomass valorization are fundamental aspects of SPECIFIC POLYMERS' research and development activities.
In this project, SPECIFIC POLYMERS will develop tailor-made biobased reversible epoxy resins made with dynamic hardeners to be used as prepreg in fiber reinforced polymer composites (FRPCs), as well as debondable adhesive.

UNE

The Spanish Association for Standardization, UNE, is legally designated as the National Standardization Body of Spain.
UNE is in charge of the standardization task in the project. This task contributes to the market update objectives of the project and with the successful commercialization of the BIO-UPTAKE innovative products.
UNE tasks are oriented to facilitate the acceptance and utilization by the make to f the developed solutions by using standards and the standardization system.

UNIVERSITY OF LIMERICK

The Bernal Institute at University of Limerick (UL) is a leading international research institute for the scientific design and manufacture of structured materials to meet global challenges, particularly in the areas of health, energy and the environment.
UL will be involved in the life cycle analysis and bio carbon fibre development work in BioUptake.

UNIVERSITY OF AVEIRO

The Center for Environmental and Marine Studies of the University of Aveiro (UAveiro) develops leading international research on environmental and marine sciences, following a multi-actor and transdisciplinary approach, promoting scientific advancement and based-informed policies. UAveiro will be involved in the characterisation of the environmental and human safety of the bio-based materials and products to be developed.

European projects :

- **BE-UP**: Boosting the Industrial Uptake of Biodegradable polymers
- **BIOGEMSE**: Bio-intelligent manufacturing and digitalized additive manufacturing for sustainable construction materials.
- **BIONTIER**: Breaking Frontiers in sustainable and circular biocomposites with high performance.
- **BIOPHENOM**: Multifunctional biophenols for safe and recyclable materials
- **BIOSTRUCT**: Manufacturing processes for bio-based fibre-reinforced composite parts for structural applications.
- **BLADE2CIRC**: Using biobased carbon fibers, biobased thermoset and dynamic materials through new recycling technologies to extend the useful life of the wind turbines.
- **BLESS**: Bridging life-cycle evaluation and safe solutions towards seamless criteria for proactive decision making.
- **CHIHIRO**: High-Performance Rubber materials from guayule for biobased products.
- **CRediBLE**: Digital and intelligent solutions for climate, energy, and mobility applications.
- **CUBIC**: Improving the circularity of complex plastic multi-material composites using novel biobased materials in B2B semi-finished products.
- **HALO-TEX**: Innovative circular approaches for the textile ecosystem.
- **MASS-IPV**: Enabling massive integration of PV into buildings and infrastructures
- **MAST3RBOOST**: Maturing the production standards of ultraporous structures for high density hydrogen storage bank operating on swinging temperatures and low compression.
- **PLASTICE**: Closing the loop in the plastic lifecycle
- **POMATO**: Advanced digital monitoring, process optimization, and intelligent industrial control technologies for sustainable manufacturing environments.
- **REACTION**: Advanced technologies and digital systems for civil security and resilience applications.
- **REFORM**: Printed electronics for the circular economy
- **RETAIN**: Circular and sustainable solutions for bio-based and agri-food value chains.
- **SOPHIA**: Implementation of Advanced Digital Solutions to increase the circularity of PV panels throughout the full value chain.
- **SORT4CIRC**: AI and digital technologies for advanced circular sorting and recycling systems.
- **TexMat**: Digital platform, traceability, and AI-driven tools for circular and sustainable textiles.
- **THERMOFIRE**: Bio-based fire-retardant thermoplastic composites reinforced with natural fibres.
- **TORPROPEL**: Toroidal Propellers for Efficient and Sustainable Aviation
- **TOSCA**: Manufacturing Processes and Digital Tools for more Sustainable Composite Aerostructures.
- **VIABLE**: Valorization of lignin bIomass into competitive components grAdually replacing BPA in the formuLation of Epoxy resins.
- **ZEVRA**: Zero Emission electric Vehicles enabled by haRmonised circulArity

Current expertise for further collaboration

SPECIFIC POLYMERS

SP's capabilities and expertise areas include:

- Design and synthesis of bio-based monomers, polymers and functional ingredients
- Advanced formulation engineering for coatings, adhesives, structural resins, and multifunctional materials
- Physicochemical, rheological and thermo-mechanical characterization
- Proof-of-concept validation from lab-scale synthesis to pilot/industrial transfer
- Bio-based, bisphenol-free resins
- Advanced PFAS-free coatings
- Vitrimer materials and biodegradable polymers for recyclability, reprocessing and self-healing
- CO2-based cyclocarbonate building-blocks and non-isocyanate polyurethanes (NIPU)

IRIS

IRIS Technology Solutions is particularly interested in future European collaborations related to:

- Industrial digitalisation and Industry 5.0. Smart manufacturing and process intensification
- AI-driven monitoring and control systems. Advanced process control and optimisation
- Real-time monitoring and Digital Twin integration. Digital Twins and predictive analytics
- Photonics-based sensing technologies (HSI, Raman, SWIR, NIR)
- Circular economy and sustainable manufacturing
- Smart water and environmental monitoring
- Advanced materials and bio-based processes
- IoT, edge-cloud architectures and interoperable digital platforms
- Process optimisation, automation and real-time decision-support systems
- AI-supported industrial automation

CIDETEC

CIDETEC is particularly interested in future European collaborations related to:

- Advanced bio-based polymers and functional materials development
- Circular-by-design materials and sustainable product engineering
- Recyclable, biodegradable and high-performance thermoset materials
- Alternative bio-based additives for improved recyclability and biodegradability
- Sustainable raw material substitution and reduction of Critical Raw Materials dependencies
- Design and scale-up of innovative manufacturing and re-manufacturing processes
- Factory automation, digitalization and process optimization
- Additive manufacturing and advanced production technologies
- Safe and Sustainable by Design (SSbD) approaches for bio-based materials
- Industrial process integration from laboratory to pilot-scale validation
- Materials characterization and performance assessment
- Circular economy strategies and end-of-life management solutions
- Advanced coatings, resins and multifunctional bio-based formulations
- Lightweight and sustainable materials for transport and aeronautics applications

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AIMEN

AIMEN is particularly interested in future European collaborations related to:

- Interoperability-driven approaches based on open standards
- Real-time data integration from heterogeneous systems (IoT, MES, ERP)
- End-to-end traceability across the entire industrial value chain
- Scalable and modular digital architectures
- Implementation of Digital Product Passports aligned with EU circular economy regulations
- Secure data management, sovereignty, and controlled data sharing
- Federated data approaches and industrial data spaces
- Advanced analytics, artificial intelligence, and predictive process optimization
- Compliance with European regulatory frameworks and Industry 5.0 initiatives
- User-oriented digital solutions ensuring industrial usability and adoption
- Environmental impact assessment based on reliable and verifiable data
- Digitalization strategies supporting sustainable and circular industrial processes

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POLYMERIS

Polymeris, as a competitiveness cluster, can help you build your project on several topics:

- Find a relevant partner in France or Europe on the polymer materials value chain, including RTOs, SMEs, other type of companies and laboratories
- join your project to lead the communication and dissemination tasks, and use efficiently our network to raise awareness about the project
- join your project to make link between the project and initiatives, European networks, and other R&I projects

MORE INFORMATION ON BIO-UPTAKE

If you want to know more about us, visit our LinkedIn page to see the presentation of the different partners. You will discover the majority of the members involved in the project and their role with videos and images!

Stay connected with us and we will resume our content with another newsletter around mid-2025.

Register to our newsletter

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