

## PRESS RELEASE

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### VIBES: Embracing 2 Years of Achievement in Barcelona

Celebrating their 2-year milestone, the VIBES project consortium gathered in Barcelona, Spain, on June 22, 2023, for an impactful project meeting held at LEITAT's premises. The meeting proved to be highly productive, with partners showcasing and discussing the remarkable progress and achievements attained thus far. It also provided an ideal platform to outline future plans and upcoming developments for the next semester.

VIBES is centred around revolutionising the thermoset composite materials industry, aiming to seamlessly integrate them into a circular economy. With a budget of nearly 5.3 million Euros and a duration of 48 months, the project is funded by the Bio-Based Industries Joint Undertaking (BBI-JU) under the European Union's Horizon 2020 research and innovation programme under grant agreement No 101023190.

The project partners have made significant progress in developing bio-based bonding materials (BBMs) for thermoset composites. Working together, the project research team explored synergies in three reversible approaches of BBMs: supramolecular, vitrimers, and Diels-Alder. These research efforts identified potential synergies in the ability of selectively recycling one material than another and the improvement of the recycling properties of the reversible technology used. The project also focused on improving the stabilisation and carbonisation steps of lignin-based carbon fibres, achieving outstanding mechanical properties at lab scale. Additionally, plasma surface modification of fibres was explored, and new fabrics in natural flax and carbon fibres were investigated. Carbon fibre treatment will be further explored with the biobased resin developed by the project, and optimised. Moving forward, the project aims to design, develop, and validate new composite materials with intrinsic recyclability properties, followed by the pilot-scale development of VIBES recycling technology.

Throughout their journey, the partners actively participated in prominent events, expanding their reach and impact. From presentations at conferences like "Roadmap 2030 for a Sustainable Economy" to exhibiting at exhibitions such as Packaging Première & PCD Milan and JEC World 2023 Fair, partners strengthened their network and shared their expertise in sustainable innovation.



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The VIBES project's research contributions have also been recognized through publications in prestigious scientific journals. Notable papers include topics such as lignin-based carbon fibres and biobased epoxy reactive diluents. Additionally, industrial communication platforms featured interviews with project partners, showcasing the project's innovative research and its potential industry impact.

To further exchange knowledge, the VIBES project is offering an English summer course on "Enhancing Recyclability of Thermoset Composite Materials through Greener Recycling Technology." This 30-hour program combines theoretical and practical components, providing participants with expertise and skills to apply real-world scenarios in the circular economy. The VIBES summer course is accessible online from May 15, 2023, to September 15, 2023, with a practical session held on September 15, 2023, at PLATA (Teruel Airport) headquarters in Spain. Interested participants can create an account and enroll at <https://aitemy-learning.com/academy/login/index.php>.

Stay informed about the latest progress and developments of the VIBES project by visiting the official website at [www.vibesproject.eu](http://www.vibesproject.eu). Don't forget to subscribe to their newsletter for regular updates and follow VIBES on social media to stay connected.

#### Disclaimer

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