BioPhenom

cidetec
MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

About CIDETEC

CIDETEC is a private applied research organization founded in 1997 that develops and implements technological solutions with high added value and economically sustainable, through the capture, generation, and transfer of technological knowledge. It seeks to provide value to companies with the goal of improving the competitiveness of its clients, as well as actively participating in improving the local business fabric and promoting the sustainability of the planet. It currently has a staff of 265 employees, where 54% of the researchers have a PhD. The turnover reached €21.1 M in 2023.

CIDETEC is a member of BRTA (Basque Research and Technology Alliance), the alliance made up of 4 CICs and 13 technology centres, the SPRI Group, the Basque Government and the Provincial Councils with the aim of increasing cooperation between agents of the Basque Science Network, Technology and Innovation.

Located at the Donostia-San Sebastián headquarters of the Gipuzkoa Scientific and Technological Park and with facilities also in the Gipuzkoa MUBIL Electromobility Pole, CIDETEC integrates three technological centres of international reference in Energy Storage (CIDETEC Energy Storage), Nanomedicine (CIDETEC Nanomedicine) and Surface Engineering (CIDETEC Surface Engineering).

Each of these centres has its own offices and installations furnished with top-of-the-line equipment, including the most important laboratories for battery testing in southern Europe, pilot plants for the comprehensive manufacturing of batteries, equipment to synthesize, characterize and process advanced polymers and composites, as well as fully equipped laboratories for the study, characterization, and treatment of surfaces.

In its 27 years of experience, CIDETEC has participated in hundreds of research projects, and, within the European framework, it is currently part of 89 projects (Horizon Europe + Horizon 2020), coordinating 24 of them.

CIDETEC RESEARCHERS

Dr. Aratz Genua
Senior researcher at Cidetec's Polymers and Composites Unit. WP3 leader and Biophenom Project manager. Working on 3R resin formulation.

Edurne Elorza
Junior researcher at Cidetec's Polymers and Composites Unit. 3R resin formulation in WP3.

Dr. Virginie Boucher
Senior researcher at Cidetec's Polymers and Composites Unit. Composite processing in WP3.

Olaia Ochoteco
Laboratory technician at Cidetec's Polymers and Composites Unit. Composite processing in WP3 and recycling in WP4.

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What will the BioPhenom project add to the current scientific state-of-the-art?

Recycling thermoset composites is difficult due to non-recoverable resins and energy-intensive fiber recovery. Intrinsically recyclable epoxy resins, which are covalent adaptable networks, show promise as alternatives to conventional thermosets. BIOPHENOM aims to advance this by utilizing a dynamic amino hardener with a cleavable bond, enabling easy repair and recycling in an eco-friendly solvent.

What will be the role of your organisation in the project?

CID will develop recyclable biobased flame-retardant epoxy resins and small-scale CF composites, assess their mechanical and flame resistance properties to select the best application, and show the recyclability of these composites, recovering high-quality CF and biobased, reversible epoxy matrix through innovative chemical processes.

CIDETEC FINANCIAL MANAGERS

Alicia Gomez

Financial reporting in WP1.
EU Project Management Office

CIDETEC RESEARCHERS

Dr. Asier Martinez

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Dr. Alaitz Rekondo

Principal Investigator, Head of Polymers and Composites Unit. Support to project manager.

Dr. Amaia Llorente

Junior researcher at Cidetec's Polymers and Composites Unit. Composite recycling in WP4.

Dr. Elena Jubete

Principal Investigator, BDM for European Programmes. Exploitation activities and IPR management in WP6.

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