

R&D company specialized in biobased and recycled composites materials offers its expertise to join a consortium for the HORIZON-CL5-2024-D5-01-08 topic "Competitiveness and digital transformation in aviation - advancing further composite aerostructures"

## Summary

Profile type	Company's country	POD reference
<b>Research &amp; Development Request</b>	<b>France</b>	<b>RDRFR20231023021</b>
Profile status	Type of partnership	Targeted countries
<b>PUBLISHED</b>	<b>Research and development cooperation agreement</b>	<b>• World</b>
Contact Person	Term of validity	Last update
<a href="#">Alice MOROSINI</a>	<b>23 Oct 2023</b> <b>22 Oct 2024</b>	<b>23 Oct 2023</b>

## General Information

### Short summary

A French SME specialised in the development of bio-sourced composites is looking to join a consortium for the topic HORIZON-CL5-2024-D5-01-08. The company has an expertise in natural fibres characteristics and in composites made with recycled products (recycled used tyres, recycled carbon fibres). Entities preparing a proposal for this topic or involved in previously European funded projects GENEX, DIDEAROT, CAELESTIS, INFINITE, NEXTAIR, OPTICOMS, AFPMet, RACER, SORCERER... are sought.

### Full description

Created in 2008, this French SME benefits from over ten years of experience in bio-based composites mainly for the transportation sector (automotive, aeronautics, naval...) but also for sports and leisures activitites. The company has also developed recently a portfolio of composites made with recycled used tyres and recycled carbon fibres.

The SME is experienced in European projects, having participated in 3 Euroepan projects: BRIGHT (bamboo bio-

based fibres for aircraft cabin interior), BIOPANELS (bio-composite panels solutions for several applications) and MANIFICA Recycling (carbon fibre recycling process)

The HORIZON-CL5-2024-D5-01-08 topic "Competitiveness and digital transformation in aviation – advancing further composite aerostructures" is of high interest for the company and they are looking for a consortium to join.

This call aims at:

- Developing advanced composite technologies with emphasis on new-designs, high-volume sustainable manufacturing with integrated inspection, sustainable and free of toxic substances, recycling and circularity, structure safety requirements and additive manufacturing
- Developing breakthrough technologies in coupled aerostructures-systems-propulsion integration
- Proposing cost-competitive maintenance and repair of composite aerostructures

With over ten years of experience in natural fibres (bamboo, flax, basalt...) characteristics, bio-based composites made of co-products, bio-based composites development and their associated manufacturing processes... the company could contribute to all the objectives above.

With a lot of experience in the development of bio-based composites for aeronautics, the company can particularly contribute to develop circular bio-based composites meeting high performance requirements and having sustainable properties.

Thanks to its long expertise in bio-based composites, the company can also propose significant improvement of environmental performance across the value chain against specified fossil and/or bio-based benchmarks. For many years, all developments of new composites materials have been made considering the Life Cycle Analysis of the products, in order to reduce their environmental footprint. All composites developed by the company address environmental stakes.

Partner sought are academics or industries preparing a proposal targeting advanced composite technologies, and cost-competitive maintenance and repair of composite aerostructure. It could be for instance, aircraft manufacturers R&D departments, advanced materials R&D academics, OEMs...

The company is also open to discuss any other kind of collaboration either related to European calls participation or technological agreement.

#### Advantages and innovations

The company has its own laboratory dedicated to the development of composites. It includes vacuum pumps, several heaters, measuring devices, precision balancing and specific tooling and testing for composites. It masters the processes of infusion, RTM (Resin transfer molding), Prepreg, RFI (Resin Film Infusion) and press. Thanks to these facilities, the company can develop a wide range of composites samples, and then builds prototypes or demonstrators from the chosen composites. The company owns patents on composites products, and also secret know-how on manufacturing process.

#### Technical specification or expertise sought

#### Stage of development

**Under development**

#### IPR Status

**IPR granted**

#### Sustainable Development goals

- **Goal 9: Industry, Innovation and Infrastructure**
- **Goal 7: Affordable and Clean Energy**
- **Goal 12: Responsible Consumption and Production**

## Partner Sought

#### Expected role of the partner

Type or partner sought: Coordinator of a consortium preparing a proposal. It could be either a company or an academics specialised in Aviation, Materials, Composites, Maintenance, Bio-sourced products...

Entities involved in the following European projects are clearly in the scope: GENEX, DIDEAROT, CAELESTIS, INFINITE, NEXTAIR; OPTICOMS, AFPMet, RACER, SORCERER, EcoTECH or Composite Fuselage.

The partner sought will integrate the expertise of the French SME in the proposal and assign it with the relevant tasks.

#### Type of partnership

#### Type and size of the partner

**Research and development cooperation agreement**

- **University**
- **R&D Institution**
- **SME 11-49**
- **SME 50 - 249**
- **Big company**

## Call Details

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Framework program

**Horizon Europe**

Call title and identifier

**HORIZON-CL5-2024-D5-01-08 topic “Competitiveness and digital transformation in aviation – advancing further composite aerostructures”**

Submission and evaluation scheme

**single stage**

Anticipated project budget

Coordinator required

**Yes**

Deadline for EoI

**1 Apr 2024**

Deadline of the call

**18 Apr 2024**

Project duration in weeks

Web link to the call

Project title and acronym

## Dissemination

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### Technology keywords

- **01001002 - Digital Systems, Digital Representation**
- **02007005 - Composite materials**
- **02011001 - Aeronautical technology / Avionics**

### Targeted countries

- **World**

### Market keywords

- **08001004 - Fibre-reinforced (plastic) composites**

### Sector groups involved