

## Focus

### Launch of the European BIOSTRUCT project targeting the development of biocomposites

The [BioStruct](#) project, coordinated by Profactor, was launched on Tuesday, February 13th. Its main goal is to develop manufacturing processes to boost the use of bio-based fiber-reinforced composites for structural applications. Co-funded by Horizon Europe, the European Union's research and innovation program, this public-private European partnership involves 10 organizations and will continue for three years.

#### Main objectives

To tackle the existing challenges linked to the utilization of biocomposites in structural components and expand the range of applications for bio-composites, the project has established precise objectives:

- Developing an accurate draping process to control fiber orientation
- Creating material models to capture natural variability
- Integrating nano-structured bio-based sensors for load monitoring

#### How?

The BioStruct project will demonstrate these advancements through two distinct use cases, focusing on wind energy and boat-building applications: a full-size rotor blade and a 6m long ship hull with spars. These demonstrations aim to establish technical feasibility and attain a Technology Readiness Level (TRL) of 7 for the manufacturing technologies.

BioStruct has a global budget of over 8 million euros. 10 European organizations, both public and private, are pooling their scientific and industrial knowledge: Profactor (Austria), Abele (Germany), Amura (Spain), Bladeworks (Italy), CIDETEC (Spain), EnginSoft (Italy), IDEKO (Spain), Lumoscribe (Chypre), NOMA (Pologne), Techtera (France).

#### Expected results

The BioStruct project aims to achieve several outcomes, such as increased productivity, ensuring consistently high quality in high-precision manufacturing, promoting strategic independence for the EU manufacturing industry, and lowering greenhouse gas emissions.

By concentrating on boat building and wind energy, the project directly targets 25% of the market, and potential applications in sports equipment and automotive are anticipated to boost the share to 45%. With the projected growth of the bio-composites market, the consortium envisions a market

potential of around €100 million by 2030, leading to a significant reduction in greenhouse gases, estimated at 2.5 to 4.3 million tons of CO2 per year.

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## They are new members

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### 3D-TEX

**3D-TEX** is a textile industrial start-up. It positions itself at the convergence of environmental - social responsibility and digital - industrial transformation.

A pioneer in the development and manufacturing of seamless knitting, its innovative approach is focused on zero waste and the complete digitalisation of its procedures. This is thanks to the latest digitalisation and 3D textile manufacturing technologies, using its double and 4 needle bed rectilinear looms.

The company operates in two main sectors: ready-to-wear and technical textiles. The technical textile sector has experienced significant growth in various fields, such as medical (orthotics, compression devices), sports equipment (shoe uppers), industry (protective textiles) and aeronautics (shaped knitted reinforcements).

The 3D-TEX team, made up of around forty people, shares a common vision focused on the use of technology to aid performance, sustainable development and relocation. 3D-TEX consists of a design office and a production factory (knitting and post-knitting finishes).

**Website:** <https://3d-tex.fr/>



### MULLIEZ-FLORY

The **Mulliez-Flory** family group has established itself as a major player in professional textiles in France. It has developed comprehensive expertise in the design, manufacturing and distribution of professional clothing.

Since its creation in 1824, the Group has been able to adapt to the various evolutions in the industrial world. In the 1940s, it became the first industrial group in the region. It integrated the spinning, weaving and making of linen articles. Then, in the 70s, it launched into the manufacture of work clothes.

Today, Mulliez-Flory creates and manufactures professional clothing and linen products for private and public companies, whatever the profession or function of the person to be clothed. It covers all markets, including the health sector (hospitals, and other health establishments and associations).

One of its main strengths lies in its complete integration as a French creator and manufacturer, ensuring the production process from end to end. This goes from giving advice about marketing, with the prototyping carried out in France, the industrialisation in its own three workshops in Tunisia – right down to logistics!

Today, the Group has 230 employees in France, and 625 employees in its Tunisian workshops. More than 12 million items are sold per year. This means that, around two million people in France are clothed by Mulliez-Flory.

**Website:** <https://www.mulliez-flory.fr/>

## Your appointments with the cluster

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### **April 16, 2024: Australian market opportunities for the textile industry** Webinar

Techtera invites you to participate in a workshop on the study of “Australian market opportunities for the textile industry”; organised as part of the [EuroBoosTEX](#) project, during a webinar.

#### **On the programme:**

- **Presentation of the Citeve study report:** Citeve, technological centre for the textile and clothing industry in Portugal, will unveil the conclusions of its report on the promising opportunities offered by the Australian market. In-depth analyses and strategic insights will be communicated to you, to guide industrialists in this dynamic market.
- **Intervention of a market expert:** An expert will provide an in-depth perspective on current trends, challenges and emerging opportunities for the textile sector in Australia.
- **Business testimonials:** Business representatives will share their journeys based on real-world examples.

Don't miss this unique opportunity to gain valuable knowledge and develop your business prospects in the Australian market!

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### **April 23-26, 2024 : Techtextil trade show (Technical textile) - KORTRIJK BELGIUM**

Techtextil is the worldwide event for the technical and nonwoven textiles sector. It will take place from April 23 to 26, 2024 in Frankfurt.

Every two years, the show attracts more than 1,500 exhibitors – 46 countries are represented.

During the last edition, Techtera accompanied 30 firms and thus represented the first French delegation to the show – 360 m<sup>2</sup>. On average per participant, the firms made 64 qualified contacts. This first French delegation to the show, with 360 m<sup>2</sup>, resulted in 87% participant satisfaction.

In partnership with Business France, Techtera will once again be present to support French companies in the sector and optimise their participation, thanks to:

- Market support prior to the show
- Participation in the French pavilion cocktail
- Organisational support
- Many targeted communication actions to highlight the know-how of the participants

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## November 23-26, 2024 : Congress on Polymer and Composite Materials in Building and Civil engineering - 77420 CHAMPS-SUR-MARNE

SFIP is launching the 4th edition of the congress on “Polymer and Composite Materials in Building and Civil engineering” to be held on the 27th & 28th November 2024.

This event is organised in partnership with CSTB, ENPC, Orgagec, Plastics Europe, Techtera, UPB and the University Gustave Eiffel.

Experts from the building and civil engineering industries, as well as the polymers and composites’ ones, are invited to take part in this key event, to share their knowledge and devise joint developments.

### These conferences and exchanges will cover the following main themes:

- Changes in regulations, legislation, and directives
- Decarbonisation of industrial sectors: eco-design, circularity, sustainability, eco-responsible alternatives, bio-based materials, dismantling, recycling, reuse, etc.
- Innovation in materials and processes: flooring, cabling, road surfaces, waterproofing membranes, structural and architectural applications, decoration, paints, 3D printing, etc.
- Functionality: mechanical, thermal, fireproofing, waterproofing, acoustic, soundproofing, haptic, aesthetic, energy, photovoltaic performance, etc.

Submission for call for papers - Deadline 10 may 2024: [Call of papers](#)

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## Life of the members

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### Eric ZAMAI, Professor INSA Lyon at AMPERE, new director of the Carnot Ingénierie@Lyon institute

Eric ZAMAI, Professor INSA Lyon at AMPERE, is the new director of the Carnot Ingénierie@Lyon institute since January 1, 2024.

Holder of a doctorate in Industrial Computing from the Paul Sabatier University of Toulouse (prepared at LAAS-CNRS) in 1997, Eric ZAMAI was recruited as a lecturer at Ensieg, now Ense3, in 1998, after 1 year of ATER at Paul Sabatier University in Toulouse. He then obtained his HDR from the Polytechnic Institute of Grenoble in 2006. Until 2019, he developed his research successively at the Grenoble Automatic Laboratory (LAG) then at the Laboratory of Sciences for the Design and Optimization of Production (G-SCOP). In 2019, he was recruited as a University Professor at INSA Lyon and a researcher at the AMPERE Laboratory.

His research theme concerns the management of complex industrial systems in uncertain contexts and focuses on the detection and diagnosis (reactive or predictive) of operating hazards, whether of a normal nature (breakdowns, wear phenomena, etc.). ... or intentionally provoked (Cyber-Maliciousness)

Website: <https://www.ingenierie-at-lyon.org>



## Alliance Machines Textiles: Environmental innovation in post-dyeing drying

Alliance Machines Textiles tested a new innovative dyeing machine with its customers and prospects during the ITMA 2019 trade fair in Barcelona.

The aim was to develop an automated drying process for textiles after dyeing, without the need for manual intervention.

After receiving the INNOV'R label from the Auvergne-Rhône-Alpes Region with the cooperation of the BPI in 2020, the development programme will come to fruition next June with the commissioning of the first example of the machine, called ROTERA AERO.

After establishing the important stages of prototyping and sizing, carried out by Alliance Machines Textiles, the “drying” function, with its low environmental footprint, was developed with the assistance of the IFTH (French Institute for Textiles and Clothing).

**This innovation represents a step forward towards reducing the environmental footprint of the dyeing stage.**

The main features will include hands-free post-dye drying with less drying frame costs, non-dilution of primers before treatment and elimination of pre-coating treatment.

**Website:** <https://www.alliance-mt.com/fr>



## BARRISOL NORMALU, a succession of award-winning innovations

Since its beginnings, Barrisol Normalu has traced a remarkable trajectory in the world of innovation and architectural design. Founded in 1967, this French company has established itself as a pioneer in the field of stretched ceilings.

The Barrisol Normalu journey is punctuated with awards, demonstrating its commitment to excellence. The latest is the INPI\* trophy, which rewarded the “exemplary industrial property strategy” of the Barrisol Normalu company, in the category “Export”.

Present in more than 100 countries, the company generates 68% of its turnover from exports. This presence in numerous countries, as well as the quality of the products offered, enables the company to work with the most prestigious brands – and create outstanding projects.

Since its founding, the company has always been committed to respecting the environment. It has recently developed a new range of Biowood® canvases, made from 92% natural ingredients.

*\*INPI is a French organisation that manages intellectual property rights, notably patents, trademarks, designs and models.*

**Website:** <https://barrisol.com>

# Calls for projects

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## EUROPEAN AND INTERNATIONAL CALLS FOR PROJECTS

LIFE Programm - *More information:* [here](#)

Horizon Europe - *More information:* [here](#)

European Defence Fund - *More information:* [here](#)

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## CART'TEX

**Call for applications for the CART'TEX chart (reserved for TECHTERA members)**

Textile companies wishing to join "CART'TEX", the chart of textile skills created by TECHTERA, can make themselves known to Issam CHAOUKI.

**The CART'TEX database is the daily tool of the cluster for managing the search for partners for all projects, and for the response to business opportunities.**

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