

February 2024

Edito

Techtera's everyday prospecting action for the textile sector

By Corinne FARACE, CEO of Techtera

The teams are fully committed to supporting you on a daily basis while preparing for the future and long-term projects.

This involvement is reflected through various actions. In particular, by the efforts made to influence the programming of future European programmes so that textiles are clearly identified. Techtera also actively participates in round tables, raising awareness among general engineers about textile issues and how this industry can react to their objectives.

At the same time, Techtera contributes to the implementation of methods that will allow the sector to best optimise work flows, whether energy, water or logistics.

The innovation cluster is also engaged in upstream programmes, collaborating with other sectors on Life Cycle Analysis methods, in order to identify the main sources of pollutants and analyse potential solutions.

This long-term commitment is not to the detriment of your short-term projects. Do not hesitate to contact us to discuss an innovation project, an investment or just an idea.

Recently, our Innovation Commission again approved projects ranging from a few thousand euros to a million euros.

Focus

Towards a more circular textile and flexible materials industry: three projects certified by Techtera

The transition to a more sustainable and environmentally friendly economy is at the heart of world-wide concerns. With this in mind, the Ecological Transition Agency, ADEME, financially supported three projects approved by Techtera as part of France 2030, aiming to promote sustainability, innovation and circularity in the textile industry.

Discover these three projects:

OzoCell: Upgrading of co-products from oilseed flax cultivation into an artificial cellulosic fibre with low environmental impact

Oilseed flax, grown for its oil-rich seeds, generates a non-recycled co-product: Straw, which is rich in cellulose, lignin and hemicellulose. This straw is a problem for farmers. They cannot spread it on the fields because of its slow breakdown characteristics.

The OzoCell project, led by Linéa Semences de Lin, in collaboration with CETI, Décathlon, Unilasalle, and Bretagne Pack, aims to upgrade this oilseed flax straw. The cellulose, extracted from the straw, will be functionalised then transformed into filaments and artificial cellulose fibres. A process, based on the use of ozone, will be developed to achieve this transformation of biomass, combining biosourced chemistry and green chemistry. Cellulosic fibres and filaments are positioned as alternatives to current viscose and Lyocell processes. The sports market, represented by Decathlon, and those working with technical textiles, represented by Bretagne Pack (producer of food netting), seek to use them in order to reduce the environmental impact of their products.

CASTTOR: Revolutionary recycling of complex polyester-based textiles

Due to its composition, less than 10% of used clothing is collected and retransformed into new reusable materials. Current thermomechanical and mechanical recycling methods do not make it possible to recycle a certain number of textiles. So, Recyc'Elit has developed a chemical technology making it possible to selectively depolymerise the polyester present in textiles, including when it is mixed. The aim is to demonstrate the viability of this process on a pre-industrial scale, which would notably allow a 95% reduction in greenhouse gas (GHG) compared to landfilling. The project led by Recyc'Elit, in collaboration with De Dietrich, Axel'One and IFTH, concerns the design of an industrial demonstrator capable of recycling 75 kg per day of waste or used materials leading to the production of monomer.

PLAIRE: High-performance plastics made from 100% recycled materials

The PLAIRE project aims to develop high-performance plastics made from 100% recycled materials. Led by the company CYCL-ADD, this project is part of the theme of plastic recycling, with the aim of creating new Recycled Raw Materials (RRM) from waste that is difficult to recycle. By emphasising local waste collection and promoting local and national marketing, PLAIRE responds to the growing market demand for recycled plastics. The project intends to optimise a patented mechanical recycling process.

These three projects embody innovation, sustainability and circularity in the textile industry; a major pillar of Techtera's strategy. They pave the way for more environmentally friendly practices, thus strengthening France's commitment to the transition to a greener and more circular economy.

Contact: Sonia DESCOINS - communication@techtera.org

They are new members



BOLDODUC

Founded in 1952, the **BOLDODUC** firm is a key player in the design, manufacturing and sale of products based on technical textiles. This dynamic small/medium enterprise, based near Lyon, targets various markets: sport, industry, health, services and bio-agronomy.

With nearly 400 employees spread between France and Tunisia, Boldoduc offers comprehensive expertise, supporting its clients at each stage, going from specifications right through to mass production.

The workshops guarantee an integrated manufacturing process, including knitting, weaving, printing and making the clothing; thus ensuring knitting that is 100% made in France.

Seventy percent of Boldoduc's products come from recycled materials or organic crops. All of the company's products are manufactured and created exclusively in France or in the Euro-Mediterranean region.

Building on its position as a world leader in certain niche markets, with customers all over the world, the Boldoduc Group continues its growth, with a desire to open up to new markets.

Website: https://www.boldoduc.fr/



SLOER

The French start-up **SLOER** offers a multifunctional digital identity, which extends the lifespan of textile products.

Created in partnership with the brand names, this digital double takes the form of a QR-code affixed to the product. This, concentrates traceability, repair, recycling and resale of the item in one single tool. It is the first complete & affordable digital

identity on the market – with 4,000 products fitted just a few months after its launch.

At the heart of the proposed system: "second-hand" advertisements can be created in just one click, creating a pre-filled form using the brand name data. These advertisements are then visible on https://sloer.co/, a "second-hand" display place between individuals; designed to promote and commission the brand names.

The other functions offered (traceability, repair, recycling) are powered by specialist partners and are integrated by the brand, as and when they are required.

Website: https://sloer.co/

Your appointments with the cluster

February 22-23, 2024: From waste to WOW: get inspired on recycling and circularity of composites, wood and textiles (final event of the REC-N-COMP project) - KORTRIJK - BELGIUM

Join us at the Circular Materials Center in Kortrijk on 22 February 2024 for the final event of the REC-N-COMP project on the recycling, reuse and circularity of composites, wood and textiles.

Discover circular business models, sustainable bonding technology and internationalisation opportunities.

Be inspired by innovative companies and develop your network at a half-day trade fair.

The event will include a dinner, and is open to any member company of one of the project partners, including Techtera.

Inscription & programme

Contact: Robin ODDON - roddon@techtera.org

Februray 23, 2024 : Presentation of Calimero results - Techtera - 91b chemin des Mouilles - 69 130 ECULLY

In response to the growing demand for environmental transparency, several European countries, including France, having already adopted the AGEC law (anti-waste law for a circular economy). They are considering the environmental labelling of products. To standardise assessment methods, the European Commission published a guide in 2021. This standardises the Life Cycle Analysis (LCA) calculations, and defines sixteen impact categories. However, biosourcing experts note problems with these methods, especially with regard to products of biosourced origin, where the current method does not take into account the storage of carbon by plants. This has a real effect on the accuracy of the results.

Faced with this fact, the CALIMERO consortium was created as part of the European project "Horizon Europe" (July 2022-June 2025). It aims to identify the shortcomings of current methods in five industrial sectors, including textiles, as regards modelling real processes. It proposes optimisation with particular attention to the progressive nature of greenhouse gas emissions.

The final objective is to re-evaluate the processes with an "enriched" LCA method to propose sectors that more sustainable.

The first results will be presented during an Innovation Workshop one year after launch of the project.

Contact: Juliette JAUPITRE - <u>jiaupitre@techtera.org</u>

March 5-7, 2024 : JEC WORLD exhibition (Composites) - PARIS-NORD VILLEPINTE

<u>JEC WORLD</u> is the international exhibition that brings together the worldwide composites industry, offering users a complete overview of processes, new materials and dedicated systems.

In 2023, this unique event drew more than 1,200 exhibitors and 40,200 visitors over the three days of the show; thus, giving exhibitors the opportunity to develop their network by showcasing their know-how to clients.

As part of the 2024 edition, the Techtera, Axelera, Polyméris and CIMES, innovation clusters will support French companies on a joint regional stand, under the "Auvergne-Rhône-Alpes Composites" banner, booth 5E98.

The collective is supporting 7 companies for this 2023

edition: <u>DMM</u>, <u>Marduel</u>, <u>Pernoud</u>, <u>CEA</u>, <u>Sopara</u>, <u>TF Etudes</u>, <u>Tisstech</u>, <u>Manutex</u>.

With the support of the Auvergne-Rhône-Alpes Region.

Contact: Valentin NALLET - vnalletatechtera.org

March 22, 2024 : AlpTextyles – Research day: the living textile heritage of the Alps, the roots to a circular and sustainable future - Hôtel de région

- 101 cours Charlemagne - 69002 LYON

As part of the European project <u>AlpTextyles</u>, Techtera is co-organizing a research day hosted by the <u>Auvergne-Rhône-Alpes Region</u> on the subject of Alpine textile heritage.

This day will provide an initial update on the project's progress and will notably present the results of the mapping of Alpine textile heritage, covering know-how, aesthetics, consumer perception, and the cultural dimension of Alpine textiles. The full program will be published soon.

Join us for a journey centered around circularity, collaboration, and innovation. Explore AlpTextyles, a project co-financed by the EU, and immerse yourself in the mappings of the sector as well as textile value chains in the Alps.

Participation in this event is free, and registrations will open soon. As the number of seats is limited, you can already inform us of your interest by email.

A networking lunch and an exhibition space will be organized alongside the day's conferences. The event will be held under the patronage of Laurent Wauquiez, President of the Auvergne-Rhône-Alpes Region.

This event will be conducted in both French and English, with simultaneous translation.

Website: https://www.alpine-space.eu/project/alptextyles/

Contact: Robin ODDON - roddon@techtera.org

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 <u>EuroBoosTEX</u> 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!

Contact: Valentin NALLET - vnallet@techtera.org

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^2 . On average per participant, the firms made 64 qualified contacts. This first French delegation to the show, with 360 m^2 , 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

Contact: Valentin NALLET - vnallet@techtera.org

Life of the members



MCVE technology: Innovation in printing circuits on organosheets

In recent years, new advances in the production of thermoplastic composites have emerged. Thanks to its EOPROM® ink technology, MCVE Technologie has confirmed the feasibility of printing circuits on PA6 organosheets. These materials combine the rigidity of thermoplastics with the

strength of fibrous reinforcement. Organosheets represent an ideal solution for reinforcing structures, thus replacing metal with lightweight parts. They are ideal for high-throughput manufacturing processes such as injection moulding and compression over-moulding.

The integration of organosheets with EOPROM® technology helps streamline production, reduces manufacturing costs and offers designers greater flexibility in the design of innovative functional 3D products. This new technology, IME (In Mold Electronic), is totally additive and environmentally friendly.

Furthermore, MCVE Technologie has also validated the use of the technology on organic-sourced organosheets, based on flax fibres and PA10-10 resin.

Website: https://www.mcve-tech.com/



MKM COUTURE: Launch of an innovative range of harnesses

MKM COUTURE, expert in technical sewing and specialist in the design and production of technical and safety articles since 1993, continues its commitment to innovation by expanding the range of its own brand, CILAO, developed in 2003.

After launching a range of technical backpacks aimed at

mountain enthusiasts, the brand has entered a growing market – that of high-altitude adventure parks.

Thus, CILAO today offers seat or full-body harnesses, tarpaulin bags and even rope and webbing lanyards, French production and tailor-made with a manufacturing time of 10 days.

Among its latest innovations, we find a harness, TYRO, for giant twisting zip lines. The harness has already attracted several operators of French sites, such as the giant zip line in Chamrousse near Grenoble; and also, Spanish sites thanks to the Vertikalist reseller and German sites, through Zipline Europe.

Website: https://mkm-couture.com/



Proneem: Biotechnology serving a sustainable future

Proneem, specialised in functional textile finishes, has developed a new biosourced and sustainable antimicrobial. This solution, called LACTIC®, offers a well thought out 360-degree alternative, to inhibit the growth of bacteria responsible for bad smells in fabrics.

This antimicrobial exploits the exceptional properties of natural agents used for centuries to slow the proliferation of bacteria and microbes and prevent infections. This innovative approach significantly reduces the washing frequency of treated textiles, resulting in savings in energy and natural resources.

Following rigorous testing and approval of the solution, the antimicrobial treatment is currently being registered in the USA/EPA (Environmental Protection Agency) and the European Union.

By adopting this biotechnology, enterprises demonstrate their commitment to a biosourced and eco-responsible future.

Website: https://www.proneem.com/



Signing of a partnership between SERMA and ACC to carry out battery tests

SERMA Group and Automotive Cells Company (ACC), a major player in the manufacture of battery cells and modules for electric vehicles, have entered into a 6-year strategic partnership. The aim is to carry out tests on the batteries and set up a 6,500 m² test centre in the Nouvelle-Aquitaine region.

This partnership marks a crucial step in the growth of the SERMA Group's energy activity. Also, it represents a mutual commitment to promote and develop electric mobility in France and around the world.

By increasing its testing capacity dedicated to the validation of the powertrain of electric vehicles, SERMA confirms its position at the heart of the future challenges of the automotive industry. The new test centre, located in Martillac in the Bordeaux region, on an area of more than $6,500\,\mathrm{m}^2$, will welcome $45\,\mathrm{new}$ employees and will be operational from the end of 2024. The first tests at this new centre will begin in 2025.

SERMA, for the Automotive Cells Company, will carry out electrical and abusive tests on batteries developed by the R&D Expertise Center in Bruges.

This strategic alliance demonstrates a common desire and vision of the two companies in promoting sustainable electrification, both regionally and internationally.

Website: https://www.serma.com/



Chamatex: "Creativity Competition 2024" Heimtextil Prize for its Acker Trevira CS Eco fabric

Acker Trevira CS Eco fabric recently won the "Creativity Competition 2024" award at the Heimtextil trade fair.

This textile is made from post-consumer recycled yarns and is particularly suitable for the manufacture of sofas, benefiting from M1 and IMO certifications.

Made in France by Chamatex, Acker® fabrics are renowned for their quality, performance and contemporary aesthetics. Appreciated by architects and professionals, these high-end fabrics are designed to last and find their use in furnishings (curtains, sofas, etc.), wall coverings, in small and large widths.

In order to meet the strict standards of sectors such as hotels, healthcare establishments, workspaces and the maritime industry, Acker® favours the use of Trevira CS and Trevira CS Eco yarns, "non-fire" materials. Fabrics intended for the naval sector are MED (OMI) certified, guaranteeing their safe use on all types of boats.

Website: https://chamatex.net/



VirHealth, winner of regional France 2030

The VirHealth company is the winner of the call for projects "Transformation of small/medium enterprises through innovation" for its project "Performance and Sustainability of AntiMicrobial Products".

VirHealth evaluates the antiviral and antibacterial performance of antimicrobial coatings and materials.

To meet the needs of manufacturers and future regulatory requirements, the project aims to provide a technical proposal to assess the durability of these products throughout their life cycles by carrying out "worn-out" scenarios in the laboratory, using mechanical and chemical characteristics representing real conditions of use.

This unique technological system, combining performance and durability tests within the same BSL2 laboratory, will make it possible to offer complete technical support, flexibility in project management and the possibility of developing and carrying out "wear-out" scenarios in the presence of microorganisms.

Website: https://www.virhealth.fr/

Calls for projects

EUROPEAN AND INTERNATIONAL CALLS FOR PROJECTS

LIFE Programm - More information: here

Horizon Europe - More information: here

European Defence Fund - More information: here

Contacts: jjaupitre@techtera.org - jchaouki@techtera.org - cleclaire@techtera.org

viacoutot@techtera.org

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.

Contact: ichaouki@techtera.org

Techtera

91 bis chemin des Mouilles – 69 130 ECULLY - FRANCE Tel: +33 04 20 30 28 80 | Fax: +33 04 20 30 28 89 www.techtera.org



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