

# French Textile Innovation Cluster



### WHO ARE WE?

#### Competitiveness & collaborative innovation

Techtera is the French innovation cluster dedicated to textile. It animates a network of more than 282 members (companies, research laboratories, technical centers, universities and schools) with the main objective of boosting competitiveness through collaborative innovation. Since 2005, Techtera has labelled 294 R&D projects that received fundings for an amount of 721 million  $\in$ . Additionally, the cluster offers business services including international collective missions, collective booths on main trade events, supporting the launch of innovative products in the market, and identifying textile solutions for various industries.



### **European level certification**

The «Cluster Management Excellence Label Gold» is given by the European Cluster Excellence Initiative. It acknowledges the highly sophisticated cluster management of Techtera and the success and commitment of the cluster to further improve its organisational structure and routines.

Techtera is the first textile cluster to obtain the «Label Gold».





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## 4 REASONS TO BECOME A MEMBER

Anchor and develop the roots of innovation

All studies demonstrate a correlation between the results of a company and its ability to innovate. Joining Techtera means taking part in a proactive approach to innovation.



# Share risks, resources & access to specific public fundings

The labelling of projects by Techtera optimises your chances of accessing national and European fundings. Furthermore collaborative innovation allows you to enhance your investments.



# Access key players of textile innovation

Seeking a skill, taking advantage of opportunities, setting up technological collaborations in the textile sector: Techtera's network meets your needs for innovation!



## Benefit from high performance services

Techtera offers varied and relevant animation programs, assistance in your R&D projects, optimised visibility with influential key players, support on international markets...



### **TECHTERA'S SERVICES**

#### **Industry stimulation**

- Innovation workshops: generate R&D projects from technology watching.
- Techtera's network workshops: generate R&D projects from the markets.
- Valorisation workshops: promote / dissimenate the results of our members' R&D projects.
- Competitiveness workshops: improve markets knowledge for our members.
- The Techtera Clubs:
  - Club RECIT: Recycling and Circular Economy in the Textile Industry,
  - Club STeW: Smart Textiles & Wearables,
  - Club Industry 4.0: Digitalisation of the textile value chain.

#### **Business development**

- Business launching of innovative products: introduce innovations to the markets.
- International support: technological and business missions, collective booths on the main trade shows, market studies and technology monitoring.
- Business opportunities: find textile skills thanks to our 350 know-how listed in our database.

### Collaborative innovation

- **Projects labelling:** guaranty the viability of the project for better chances of getting a public funding.
- Projects support: at each key stage, for national and international projects.
- Identification of national and European fundings: identify the best suited financing and calls for projects.





## VISIT US!



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Processes

Machines

Yarns



With over 16 years of experience in developing wearable airbag technology, our founder, Alexandre Quarrey, has established a multidisciplinary engineerin

our founder, Alexandre Quarrey, has established a multidisciplinary engineering team that excels in transforming smart textile projects into real industrial products.



oduct

Sports and entertainment, medical care (health & well-being), manufacturing industry, airbag, military, personal protective equipment, luxury...

- Innovation in new technologies (sensor integration, airbags, inflatables, lighting, heating...).
- Prototyping and optimization.
- Industrialization & certification.
- Production.
- Comprehensive and reliable team : mechanics, electronics, textiles.
- 450 m<sup>2</sup> workshops.

nnovations

We are the pioneering entity dedicated to smart textile products, equipped with a multidisciplinary engineering team. We ensure the development of reliable and industrial products with complete support from R&D to production.



Booth E58D-12.1

Alexandre QUARREY contact@aq-tech.fr www.aq-tech.fr Bertheas is a French company established in 1929, specialised in the production of technical fabrics and medical elastic tapes. In the 1990's, jacquard elastic bands are integrated. It now maintains its leading position thanks to a constant investment and innovation policy.

application areas Orthopedics, men's underwear, sport corsetery and lingerie.

Technical applications such as exoskeleton, smart textile (connectivity and IoT...), work clothes, military and protection equipments...

- Elastic bands and fabrics (some including grip face).
- Elastic waistbands for underwear.
- Straps and under breast bands for sports underwear, beachwear, dancewear...
- Elastic jacquard bands for technical applications.
- Spacer 3D and loungewear textile.
- MICRO-GRIPP UF<sup>®</sup> grip elastic band ultra flat and clean cut.
- STRETCH-CTRL<sup>®</sup> reduces oscillations and avoid bounding effect while moving.
- Multifunctional textile for back belt
- · Half ready made up articles for industries.



Éric BAHON ebahon@bertheas.com www.bertheas.com



oroducts

innovations



or metallized threads or technical films. It also produces different types of traditional varns. OEKO-TEX and GRS certified.



Agriculture, automotive, electricity, electronics, food Industry, furnishing, geotextile, industry, medical, packaging, safety accessory, personal protective equipment, sports and outdoors, transports.

- Wires in silver, stainless steel, copper, nickel, different alloys to 200 microns to 20 microns.
- Slits functional films used in technical yarns (PE, PTFE, metallized films...).
- **Traditional textile yarns** with different raw materials.

- Ultra-thin and ultra-resistant anti-cut wire.
- · Aramid-based adhesive film on PVC.



Christophe CASTRO christophe.castro@blanchard.fr www.blanchard.fr <u>Booth D79B-12.1</u>





Personal protective equipment (industry, military, police forces, workers, corporate), automotive, medical equipment and luxuary.

- Polyester fabrics,
- polyester/cotton,
- 100% cotton (GOTS),
- Linen, aramid...



**Propital**, is a polyester/cotton fabric 210 g for uniforms in hospital (without formaldehyde in finishing treatment).



Hervé LADOUE h.ladoue@eurotf.fr www.eurotf.com







Chamatex Group is an integrated textile group located in France. The group develop and produce specific technical textiles.



Sport shoes, lifestyle outdoor, luxury luggage, industrial use, personal protective equipment, racing suit, medical application and furnishing.

More than 350 employees and 8 industrial plants for:

- warping, weaving, dyeing and finishing,
- outdoor and lifestyle garment making,
- luxury luggage production,
- sneakers and sport shoes assembling,
- upholstery and production of curtains.
- innovations
- Karapace is a new branded fabrics for fire-fighters protection.
- **Suspendor** is a new branded technology for military and police equipment.
- Matryx is a well-known branded technology for sport and security upper shoes.



Booth D79A - 12.1

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Protection (firefighters), defence (police, army) and industry.



Patriot: designed to provide policemen and soldiers optimum protection against heat, flame and mechanicals risks. Available in any kind of color or camouflage, this product already equips several European armies.

innovations

Twin Square<sup>®</sup>: a perfect combination between comfort, protection and durability. Its patented diamond weaving offers you high mechanical performances and excellent results in heat transfer, chemical repellency, UV exposure...



Booth C60G-12.1

Jean-Olivier DEJARDIN contact@europrotect.fr www.europrotect.fr



application areas

Filtration, technical textiles, medical, cosmetic, hygiene, composite, building, automotive and transportation.

Fibroline has developed four innovative technologies:

- · D-Preg: for technical textiles,
- S-Preg: specific deposition process for medical field,
- Y-Preg: for yarns, ribbons and tapes,
- T-Preg: high-speed configuration for hygiene.

Fibroline's technologies have a very wide range of applications because they are:

- Innovative: new products can be created,
- · Economical: energy savings,
- Fast and easy to control,
- Dry and non-polluting: no water or solvents.



Booth D90-12.0

Léa MONIN Imonin@fibroline.com www.fibroline.com



- Custom machines for soft materials in the field of winding, unwinding, cutting, calendering, splicing, lamination, buffer, palletizing, packaging, etc.
- Washing, drying, disinfection and packaging machines for PPE.
- Solutions for disinfection of workshops/ premises with ozone.
- · Water treatment solutions/liquid effluents.
- Mechanical studies, structural calculation notes.
- Electrical diagrams and manufacture of electrical cabinets.
- Automation.
- Industrial maintenance.



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products

D.M.



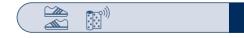
Triboelectricity.



Smart textiles, sports.



GammaO's expertise extends to the creation of electrodes using digital embroidery technology. The design and integration of these electrodes into textile are optimized to suit specific applications: energy harvesting or sensor.



Booth E78C-12.1

Pascal WEBER pascal.weber@gammao.fr r

www.gammao.fr www.uppik.fr



- Print your logo or any other visuals,
- Customization upon request.

Ongoing development of a strap that changes color according to temperature.



François HÉRAUD developpement@rubans-heraud.com www.rubans-heraud.com <u>Booth D59B-12.1</u> HE Institut Français du Textile et de l'Habillement

French technological center for the clothing and technical textile sectors. Its skills, laboratories and technical platforms, which can be mobilized throughout the life cycle of products, make IFTH a complete and unique solution.



Fashion and clothing, sport and leisure, protective equipment and workwear, heath and medical, automotive, aerospace, aeronautics, building, geotextiles...

- Innovation and prototyping, technical assistance, strategic monitoring.
- Tests: evaluation of compliance with regulations, standards and inhouse quality guidelines.
- Certification and labelling.
- · Knowledge and skills management.

innovations

IFTH innovates to develop environmentally friendly solutions in the value chain of the fashion and textile industry such as: new organic fibers, single-material products for recycling, more ecological finishing treatments, recycling technologies, among others, etc.



Booth E78C - 12.1

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This is a strong trend in both the sports and fashion markets. BiO RE-FLECTIVE is a natural evolution of our research into more sustainable solutions.



Booth E58E - 12.1

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capacities, the company supplies all metallized functional surface treatments



Medical, automotive, sportswear, aeronautic, smart textile, industry, hygiene, home, clothing, defense, agriculture, protection.

oducts

Functionals silver metallization on several materials for EMI shielding, IR reflectivity, anti-microbial, electrical conductivity, heating surface, smart textile and antistatic. Also, stainless steel: high electrical conductivity and resistance to high temperatures.

novations

Merged from a 40 years' experience company and a university's R&D technology, R-STAT<sup>®</sup> Groupe Jet Metal propose a unique know-how in the field of textile silvering.



Edouard des GAYETS - Pascal PENINON e.desgayets@jetmetal-tech.com ppeninon@r-stat.com Booth C60E - 12.1

www.r-stat.com

Manutex manufactures and markets braided and woven products, from the simplest to the most complex yarns. Specializing in narrow textiles, its know-how is based on cutting-edge industrial equipment and a team of enthusiasts who put themselves at the service of their customers.

Manutex



տ Ա

Clothing, decoration, packaging, medical, aeronautics

- Weaving and braiding products,
- Various ribbons,
- Elastic and rigid tapes,
- · Cords, ropes, tubulars,
- Customized bands,
- Technical raw materials' use .

nnovations

- Packaging
- Laser and cutting
- Sewing
- Coating
- Calendering
- Sintering



Mounir CHEHDI m.chehdi@manutex.fr www.manutex.fr





in engineering and in manufacturing technical and functional yarns. It has strong and evolving know-how and puts quality and innovation at its core.

Medical use and hygiene, protection, sports, clothing, hosiery, industry, transport, building.

- Silicotex<sup>®</sup>, grip yarn for comfort and breathability.
- Conductive yarns for electrical conductivity, EMI shielding, antistatic.
- Protectio<sup>®</sup>, composite yarn for optimal cut resistance and flex.
- Covered elastic yarns with elasticity control for medical and hosiery.

nnovations

Massebeuf Textiles's innovative process is to bring protection and durability to various yarns (PA, PES, linen, carbon...). The company has a various range of yarns with reduced environmental impact (recycled and/or organic materials, optimized process).





and in Slovakia MKM Couture is able to answer to any average and hight series production. From the creation of the specifications document to the delivery on demand, MKM Couture can adapt its organisation to every clients needs.



nnovations

Personal protective equipment (industry, military, police forces, firefighters, workers), outdoor sports equipment, fashion, luggage, sports, aeronautics and building.

- · Harness for sports and workers (CE type).
- Made to mesure ropes and webbings (CE type).
- Energy absrobers (CE type).
- Nets made to mesure (filets) (CE type).
- Mattress made to mesure (CE type).

Sport harness without buckle: MKM is the first company producing a certified harness without any buckle. The advantage for any attraction parc is the speed nedded to equip every client.

Made to mesure rope and webbing, 10 days delivery. Thank's to a very short organisation, we are very flexible to answer for any rode and webbing production. No minimum of order, and no maximum as well!



Montdor is specialised in the transformation on commission of flexible materials in rolls by giving them technical and/or aesthetic properties.

application areas

Automotive, sports and leisure, composites, upholstery, luggage, personal protective equipment, medical, wall-coverings, garments.

Montdor offers:

- embossing and deep-embossing up to 340 cm,
- molding up to 190 cm,
- bonding by calendaring up to 320 cm and hot-melt up to 180 cm,
- dot print anti-abrasion and anti-slip up to 170 cm,
- transfer printing up to 320 cm,
- pleating,
- crushing...

Montdor has developed and patented a dot print solution to considerably increase the abrasion resistance of many textiles such as warp and weft, knit (with or whitout elasticity)...

Applications: elbow and knee pads in workwear, military/police uniforms, sides of cycling pants but also bags, seats...





The company offers solutions for heat and flame protection, release coatings and abrasion resistance. Otego exports its fabrics to 110 countries.



roducts

Protech, indutech, mobiltech, packtech.

Coated and laminated fabrics:

- 5471: aramid coated with PU for laser machines bellows.
- 5422: PU coated fabric for aircraft and helicopter covers.
- 4585: alluminised fabric for PPE resisting to molten metal splashes and radiant heat.
- FLEXITOP: silicone coated fabric for dump trucks, compactor skirtings.



Fireshield is a four-layer complex unique on the market, for fire entry and proximity suits. This aramid material is laminated with aluminium and protects firefighters from deadly radiant heat but also against extreme heat. It is certified EN 1486, GA 634 and KFI.



Booth E58A - 12.1

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# Porcher industries is a global leader in technical textiles and high performance thermonlastic composites. With the belo

thermoplastic composites. With the help of its 1 650 employees spread across three continents (Europe, China, United States and Brazil), Porcher industries designs and produces innovative materials with properties tailored to highly targeted uses.



Aeronautics, defense, automotive, construction, industry, sports and leisure.

- Fabrics,
- Prepregs,
- Laminates,
- Laid scrims,
- · Mats,
- coated yarns.

innovations

Recognised worldwide as the pioneer of its sector, Porcher industries assists its clients' R&D departments from the early stages in order to help them anticipate the technological developments of tomorrow in terms of lightness, performance and comfort.



Dominique SUR dominique.sur@porcher-ind.com www.porcher-ind.com <u>Booth D59A-12.1</u>

25



products. With its biobased solutions, Proneem contributes to a sustainable future.



Home textiles, bedding, clothing, sportswear and outdoor wear, workwear, and medical equipment.



Proneem offers cutting-edge impregnation for superior textile performance, emphasizing safety and compliance. Our solutions encompass biocides, thermo-regulation, and moisture management across a broad spectrum.

innovations

LACTIC, a biobased antimicrobial, inhibits odor-causing bacteria growth. This innovative solution minimizes the need for frequent laundering, providing a sustainable approach to save energy and water.



Booth D59E-12.1

Chloé SERIEYS chloe@proneem.com www.proneem.com



polvester-based textiles.



oducts

Recyc'Elit can handle wastes (post-consumer, production scraps...) from all application areas as long as they contain mainly polyester. The aim is to create a closed loop textile-to-textile.

- · Separated monomers of PET.
- Recycled virgin quality PET resin (purity, tenacity, elasticity, spinnability, weaveability...).
- Separated pure and non degraded co-materials, such as elastane, polyamide, cotton...
- innovations

The possibility to recycle a large range of complex polyester-based textiles and valorize both polyester and co-materials thanks to their separation without degradation.

The small environmental impact of the process.



Raouf MEDIMAGH r.medimagh@recyc-elit.com www.recyc-elit.com <u>Booth E51B-12.0</u>



webbings for lashing, lifting, harness, aeronautic and for different applications. Samuel Roche export over the world.



Aeronautics, construction, industry.

Samuel Roche has around 70 looms, lot of dyeing machines as well as testing equipment (drop tower). We are able to different sorts of print on the webbings, cut and roll. The company produce shock absorber for fall protection. The majority of production is in polyester, dyneema, aramid.

The engineer team can develop new webbings All of the production is done in the center of France.

Another activity: endless slings for the construction.



Cyrille D'ONOFRIO c.donofrio@samuelroche.com www.samuelroche.com <u>Booth E58C-12.</u>1



Technical clothing, industry, medical, personal protective equipment, smart textile.

products

Satab offers a complete collection of straps, ribbons, braids, mesh and offers its customers unlimited customization of its products. Under the Eweave brand, the ribbon is equipped with detection, on-board and lighting functions.

innovations

With Eweave smart textile solution, the ribbon:

- becomes a linear sensor to detect and geolocate leaks, cuts and shocks,
- works as an ON/OFF switch, an electrical conductor or a data transfer device,
- is used as a (ambient) light.



Booth D59F - 12.1

Kevin BERGER kberger@satab.com www.satab.com



development since 1894 : throwing, twisting, doubling, covering, texturization... Its know-how is constantly increasing by looking for innovation and new materials.



Technical fabrics, medical fabrics, protective clothes, lace, sportswear, furnishing fabrics, garments.

products

Sofila is manufacturing a broad variety of yarns (natural, synthetic, artificial) from 10 to 3 000 dTex: fancy yarns, conventional and air-jet covered yarns, FT textured or air textured (Taslan) yarns, plyed, doubled, twisted yarns.

innovations

- Greenfil<sup>®</sup>: a 100% biobased yarn, with a reduced environmental impact and high mechanical properties.
- · Becool®: a thermo-regulative yarn.
- Renubil<sup>®</sup>: the Sofila range of recycled polyamide and polyester yarns.



Booth A19A - 9.1

Thibault CHARRIER contact@sofila.fr www.sofila.fr



industrial rollers

Medical, hygiene, non-woven, filtration, home furnishing, sun protection, clothing, automotive, energy, building, packaging, FIBC, geotextile.

- · Versatile slitter-rewinders
- Tension sensitive spooling lines
- In-line winder/In-line slitter
- Slitting or splicing benches
- · Ultrasonic cutting/welding equipment
- Low inertia idler rollers, winding cores, chill rolls

· New very compact ultrasonic equipment

 New coreless winding technology Our in-house engineering department combined with our laboratory allow our company to set-up trials and process feasibility to constantly innovate.



Booth D03-12.0

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oplicatior



to respond to specific requests while being reactive. Know-how and innovation «Made in France» are the guarantee of its quality.



Iron and steel, aeronautics, nuclear, electrical, automotive, rail, maritime and composites industries.



Its raw materials are glass yarn, silica, carbon, aramid, synthetic yarn. The catalog is representative of all the developments carried out in collaboration with its customers: high temperature filtration, insulation, prepegs fabrics...

Its flagship product is a flagship service: taylormade.





Specialized in high temperature insulation, Sulitec develop and manufacture a complete range of products based on technical fibers : non-woven and rigid composites using mineral resin and textile reinforrements



roduct

Industry, firefighter, petrochemichals, aeronautics, naval, railway, automotive, military, cinema, nuclear.

- Refratex<sup>®</sup>: complexes made from mineral fibre layers (glass, silica, etc.) rolls or custom made products
- Refrastrat<sup>®</sup>: rigid Insulation 100% mineral composite laminates up to 1600°C
- Sulimat<sup>®</sup>: non woven fabrics (glass, silica, basalt, etc.).
- nnovations
- Sulipack<sup>®</sup>: protective bag to carry, store or insulate your li-ion battery (different sizes).
- Duchess: ADEME France 2030 project concerning the recycling of carbon fiber composites with four partners (ENSAIT, IMT Albi, IFTH, ARC).



Booth C60F - 12.1

Jacques Luminet jacques.luminet@sulitec.fr www.sulitec.fr For more than a 100 years, Techni Sangles (engineering and development) is a French weaving company dedicated to technical innovation using high tenacity materials such as aramid, para aramid, Dyneema,

Hmpe, polyester and polyamid fibers

application areas for straps.

Personal protective equipment, outdoor sports equipment, industry and military applications, fashion and luggage.

products

Technical webbing with strength and high tenacity materials such as, narrow wide webbing, elastic webbings.

innovations

A single strap could have two or three different widths, easing passing in buckles. Mainly used in security harness manufacturing.

- Height variable patented straps
- High abrasion resistance
- Recycled polyester webbings
- Fits the European and American standards



Dolorès RELAVE-PUIG drelavepuig@technisangles.fr www.technisangles.fr <u>Booth E79A - 12.1</u>



These equipments offer a great technical versatility for straight or curved operations, or multi layers in continuous assembling, in multi-spots sealing, joining end to end narrow or wide webs...



products

FIBC industries (big-bags...), machines and looms manufacturers, packaging, technical textiles, geotextiles, non-woven, medical, awnings, plastics, flexible products...

For "synthetic thermo-fusible fabrics", the sealing/slitting technology improves the finishing of the fabrics:

- with very strong, soft and clean sealed edges (no fraying),
- with high productivity of the sealing and slitting operations,
- without any over-thickness,
- with the respect of original colours of the products to be converted,
- without any burn or not even yellowing.

innovations

Our worldwide patented "approach system" is called "Sonic Touch Control". This STC process guarantees optimal cutting results and enables a lowest wear of sonotrodes and tools.



Booth D02-12.0



Thimonnier, specialist in welding of flexible materials for over 70 years, has a recognised expertise in radio frequency. The French company fully designs and builds its presses and generators.



Leather working, paramedical/medical, plastic paper mill, automotive industry, welded clothing, blister, taut structures.



RF Thimonnier presses and welding machines have a pressure capacity of up to 30 KdaN and are equipped with generators with a power between 400 W and 30 kW RF, in accordance with the current CE-CEM regulations.

innovations

Design and manufacture of an automated large-format gantry equipped with a vision system for identifying the weld forms to be produced.

Development of combinable generators 3 kW, to obtain the required power.



Romain CHRISTOPHE romain.christophe@thimonnier.fr www.thimonnier.fr <u>Booth A26A-12.0</u>



and viral strains.



Medical, health industry, pharma, defense, sport, aerospace, automobile.



Testing according to standards ISO 18184, ISO 21702, ASTM E 2180-18 and bespoke protocols for porous surfaces and for hydrophobic textiles, durability of antimicrobial coating tests.

innovations

Performance of bespoke protocols for evaluation of the antiviral activity of paper, leather, and hydrophobic textiles by transfer of dry viral inoculum.



Booth D59C - 12.1

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