

Textile materials as a key technology for the health sector

After having highlighted the role of textile materials in the field of sustainable transport and housing, UP-tex has chosen to emphasize the importance of a third lead market for textiles : the health sector.

Health applications represent 21% of the overall turnover of the market of advanced textile materials in volume and 28% in value in the world (thus being the second market in value after transport and the third in volume after agro-resources and housing), for an annual growth of 4%. This is why UP-tex has decided to put « textiles and health » at the core of the development strategies of its companies.

Our cluster's activities in the field of health rely on **three main pillars**:

• **Environment and well-being**: this area gathers



technologies linked with filtration, cosmetotextile (smart clothes using micro-encapsulation to diffuse a substance on the body for washing, protecting or smell correcting purposes), individual protecting clothes (against fire, bacterial attacks, etc.) or high sport performance;

• **Hygiene and drying up**: this dimension covers processes used in relation with incontinence (drying up towels, layers, etc.), textiles used in hospitals (white coats and patients' environment, notably in order to fight against nosocomial diseases) or drying up wipes;

• **Medical devices**: advanced textile materials are also used to create orthosis, plasters for chronic wounds but also for the manufacture of implants and tissue engineering (devices regenerating bodies' parts).

DIMETEX : an example of a project carried out by UP-tex in the health sector

The DIMETEX project (Medical Textile Devices), led by UP-tex, Centexbel, Eurasanté and the European Centre for Innovative Textiles (CETI) aims at setting up a European-level transverse bio-textile cluster, federating all the stakeholders from the « textiles and health » sector from the Franco-Belgian cross-border region.

The number and variety of actions implemented by the consortium during the last 20 months illustrates the willingness of the textiles and health professionals to share their know-how and exchange their visions.

Six workshops gathering companies, researchers and practitioners have thus been organized, benefiting from a large participation and dealing with topics such as regenerative medicine, orthosis or setting devices.



This initiative has enabled companies to better discover the reality of the sector and its corresponding regulation. Cross-border business links have been built between manufacturers and laboratories, several projects are in progress and working groups are being set-up.

Project ideas developed under DIMETEX notably focus on bio-erosion of materials, bio-mechanics, shedding, the conception of smart orthosis for the treatment of the osteoarthritis of the knee (in view of reducing pain and increasing articular stability) and of spacity (a phenomenon characterized by cramps which mainly affect sick-persons suffering from multiple sclerosis).

DIMETEX benefited from the support of the European Union through the Interreg programme.

TEXCOMP2010: a unique international conference on textile composites to come soon! (Lille, 26/28 October 2010)

The 2010 edition of the prestigious international conference on textile composites **TEXCOMP** will take place in France (Lille), for the first time ever, from **October 26th to 28th**. The decision to choose North of France as the successor of Delaware in the United States as the host place is a consecration of the major achievements made by the research and innovation stakeholders from the region in the field of textile composites.

TEXCOMP 2010, which Secretariat is held by UP-tex, will attract the best world business and research specialists in this field. Participants will notably be able to discover the last scientific and technological developments in areas such as **composites and nano-fibres, mechanical design and modelling, numerical methods and simulation, natural fibres or net-shape 3D textile pre-forms**.

More information on www.texcomp2010.com.

The European Centre for Innovative Textiles under construction!

The wide building site of the European Centre for Innovative Textiles (CETI) opened to the public on June 5th, 2010.

The Centre, that should be operational in June 2012, represents an investment of €45 million (23 for the construction and 22 for equipments) and a surface of 12 000 m².



The CETI will be active in several research areas such as: new fibres and filaments; innovative textile structures for the development and the association of processes (weaving, non-weaving, knitting and finishing); functionalization of processes for textile materials (fibres, threads, fabrics, etc.) adapted to environmental and economic constraints, smart and communicating textiles; or modelling and characterization tools.

Companies will have access to the CETI's facilities and equipments to implement R&D programmes, but also to develop prototypes and produce in restricted quantities.

Let's meet in 2012!



WHO WE ARE?

UP-tex is a French **dynamic research driven** cluster composed of 90 members, and gathering textile, upstream and downstream companies, research and technology transfer centres, as well as universities. It aims at becoming a **European benchmark in the field of Advanced Textile Materials, Sensory Perception Technology and Mass Customization by 2015**.

UP-tex promotes research and innovation by federating the best competencies, assisting its members in the definition of projects, helping them in attracting funds and giving them access to an Intelligence Platform. UP-tex also sets up working groups on how to foster innovation.

Textile is a material which contributes to sustainable development and serves **new functional requirements** in fields such as **health care and hygiene, transport, civil and building engineering, leisure activities, clothing and protective equipment**.

UP-tex TOWARDS EUROPE

UP-tex is committed to promoting an **ambitious EU policy on clusters and European wide inter-clustering**.

After having contributed to the creation of **CROSTEXNET**, a textiles' ERA NET launched on November 24th, 2009, UP-tex is now **willing to develop its relations with other European clusters to elaborate new textile materials and applications**. UP-tex is particularly interested in developing partnerships with clusters specialized in **building engineering, transport and medical care devices**. Indeed, our research driven cluster is at the edge of several lead markets and its projects go well beyond clothing and traditional uses.

Together, let's make the European policy on clusters become a milestone of the EU 2020 strategy for a more competitive Europe !

SkyWin (cluster specialized in aeronautics and space) and UP-tex discuss about composites

On June 25th, more than 30 members (companies, universities and development agencies) of SkyWin and UP-tex got together in the framework of a workshop dedicated to composites in the field of aeronautics and space. They were given the opportunity to present their activities, exchange on possible partnerships in the future but also to discover the last research developments in the field of composites, the CETI and other instruments promoting innovation in this sector (Picardie Composites et Composites +).