

European textile research needs quantum leap

By Jozef De Coster, Bruges

It's unrealistic to expect European textile and clothing industry to quit the segment of the low-priced mass products altogether and restrict itself exclusively to high-value products with big research-input. New business models that will strengthen the competitiveness of the European clothing SMEs need to be devised.

The European Textile Technology Platform, founded in 2004, is a flourishing organisation. At its latest annual conference (Brussels, 1-2 April 2009), participating researchers presented more than 30 collective R&D projects. Up to 150 million euros of the 220 million euros of R&D related investments were covered by European subvention programs. Nice presentations and scientific reports are not the goal of research efforts. The European textile and clothing industry is eagerly waiting for commercially relevant results.

Dick Hendriks (**TenCate Advanced Textiles**), president of the European Textile Technology Platform, looked back at the five years since the foundation of the Platform. He summed up several reasons to be satisfied. The Platform has given birth to an active network of more than 600 European textile researchers. Collective research programs such as Leapfrog (aiming at revolutionary productivity enhancement in garment production) or BioTex (integration of biosensors in textiles) have opened new, promising avenues.

However, even Mr Hendriks had to admit that the Platform also has fed great expectations which up to now remain unfulfilled. The manufacture of clothing is still a labour-intensive activity and therefore remains firmly concentrated in countries where labour cost is low. Technical textile applications in modern buildings remain scarce. Intelligent textile applications seem to be more of a success in the laboratories than in the market.

"We made progress," Mr Hendriks told the 220 participants at the annual gathering in Brussels; but now, he added, "the time has come to make a quantum leap." Is this possible, he asked. "Yes, it is. That's what I personally believe," he told the meeting.

The optimism of Mr Hendriks is rather surprising. The current system of collective European research suffers from some structural defects. Also, the road from research to market is often a very bumpy one. And though participants showed sincere scientific interest in the matters presented at the conference, there was little evidence of a holy fire burning strong enough to level all barriers and realise the much needed breakthroughs. So, in spite of the confidence demonstrated by Mr Hendriks, it's not very realistic to expect that the European textile and clothing industry will massively quit the segment of the low-priced mass product and restrict itself exclusively to high-value products with big research-input. It may as well be wishful thinking that the European industry, as uncontested

technology leader, could refer Asia and America definitely to the second rank. And how the European industry could succeed in the short term to thoroughly re-design its supply chain and to make its production truly sustainable is still an open question.

Dreams that did not materialise

Devising a promising product concept is one thing; making money from such product is something else. What has eventually become of the bold dreams the textile researchers held out in the nineties—the dream to bring back garment production to Europe thanks to the automation and robotisation of the industry; the dream to conquer the world with European intelligent textiles; the dream to make full use of ink jet technology as a means to transform the European textile sector into a very flexible, knowledge-intensive industry?

These were alluring ideas that have not become reality. Systex is a research project, subsidised by the European Commission and co-ordinated by the textile department of the University of Ghent, in Belgium. Its aim is to find out why the results of the numerous, probably 100-150, European research projects in intelligent textiles hardly led to any commercial activity. Similar critical examination could be made in a lot of other 'much promising' fields of European textile research.

The European subventions for textile research seem not always to be allocated in the best possible way. It's inevitable—also a good thing to a certain degree—that individual companies that are competing with each other, are involved in overlapping research. But one would wonder why there is so much overlapping among the collective European textile research projects which are subsidised by the 6th and 7th European Framework programs. Many of the current research projects, for instance, are focusing on the security and the comfort of fire workers.

It's a pity that so few European textile and garment producers attend the annual conference of the European Textile Technology platform. There's probably no other event that offers such a complete overview of what is going on in the field of textile-related collective research and where companies can sniff up fresh ideas. Of course, the forerunners are always there—companies like **Lenzing Fibers**, **Freudenberg**, **Nanocyl**, **TenCate**, **Sioen Coating**, **Kloppan**, **Vlisco**, **Utexbel**, **D'Appollonia**, **Bivolino**, to give a few examples. However, by far the most participants at the 2009 edition of

the conference came from textile research institutes and industry federations, not from companies.

Looking for new materials and markets

Some of the more than 30 collective European textile research projects which were presented at the 2009 Brussels gathering were remarkable by their ambitious goals. Let's for instance have a look at two projects that were co-ordinated by Prof. Thomas Fischer of the German Denkendorf Institute. One of them, Avalon, aimed at creating new materials; and the other, Open Garments, at creating new business models.

The objective of Avalon is to establish cross-sectoral innovation networks for the development of novel hybrid textile structures integrating multifunctional shape memory alloys. By introducing emerging and highly promising non-textile technologies and materials, Avalon is expected to create new market perspectives in the European textile sector. Such markets could arise for reinforced composites for civil engineering, automotive and aerospace or for textiles for medical and protective intelligent clothes.

The Open Garments project stems from the assessment that the modern phenomenon of user empowerment is increasingly present in many facets of life. Look at the music industry, one of the first to embrace this phenomenon. It has adapted rather successfully its ways of doing business. According to Prof Fischer, other industries can no longer ignore this major change in user behaviour and expectations. They too need to change their ways. The European textile and clothing industry too faces an increasing demand for user empowerment. This is evident in the growing number of mass customisation sites where consumers express their need to customise the products according to their own needs and tastes.

In this context, the aim of Open Garments is to provide a solution, which will empower the consumer not only as a designer, but also as a producer and a retailer for individual garments. New business models have to be invented which will lead to consumer designed products, to a much higher degree of customer satisfaction, and ultimately to an improvement of the competitiveness of the European clothing SMEs.

Suppliers' share shifts in sluggish US apparel market

By Douglas Smith, Columbia, SC

US garment imports fell 8.2% during Jan-March as store sales remained sluggish. At the same time, many Asian suppliers led by China increased their share of the US apparel market as European suppliers and some others like Mexico lost ground.

With the exception of Wal-Mart, most US retailers selling apparel saw same store sales (stores open at least one year) fall during the first quarter of 2009. While April sales show some signs of improvement, weak retail sales continued to be reflected in the import market. Total imports of apparel fell by 10.7% to \$15.199 billion, compared with the first quarter of 2008. The value of first quarter imports was 13.8% lower than fourth quarter 2008 results. First quarter 2008 to fourth quarter 2007 results, in comparison, had a difference of only 3.5%. The quantity of garments import was 8.2% lower at 5.213 billion pieces of garments, and the average price per garment fell 2.7% from 2008 levels.

Imports from China were higher. The value of imports from China climbed 1.7% to \$4.087 billion from first quarter 2008 levels. Given the overall decline in the import market, Chinese market share climbed from 27.7% to 31.6%. The quantity imported from China was 7.6% higher at 1.642 billion pieces of garments. Market share in terms of quantity climbed from 26.9% to 31.4%.

□ The value of woven apparel shipments slipped 3.5% to \$2.933 billion, but China's market share by value climbed from 33.7% to 37.2%. The quantity of woven apparel shipments increased 1.7% to 729.391 million pieces of garments. Market share by quantity climbed from 40.1% to 45.1% of woven garments imported.

□ The value of knit apparel shipments increased 11.5% to \$1.874 billion, raising Chinese market share from 21% to 25% of import value. The quantity of knit garments imported in-

US Apparel Imports by product category					
January-March 2009					
(US\$ million)					
Type of Apparel	2007	2008	2009	Share	Change 09/08
Woven	9,680.338	9,004.186	7,889.219	51.9%	-12.4%
Knit	8,236.851	8,018.196	7,310.065	48.1%	-8.8%
Total	17,917.190	17,022.383	15,199.284	100.0%	-10.7%
Quantity Imported (Number of Garments)					
Woven	1,924,909,735	1,768,506,762	1,617,131,697	31.0%	-8.6%
Knit	4,009,523,915	3,910,159,700	3,596,859,641	69.0%	-8.0%
Total	5,934,433,650	5,678,666,462	5,213,991,338	100.0%	-8.2%
Average Cost Per Garment (US\$)					
Woven	5.03	5.09	4.88		-4.1%
Knit	2.05	2.05	2.03		-0.1%
Total	3.02	3.00	2.92		-2.7%
Quarterly Imports (US\$ million)					
1 st Quarter 2009	4 th Quarter 2008	3 rd Quarter 2008	2 nd Quarter 2008		
15,199.284	17,635.052	21,624.355	16,757.097		
1 st Quarter 2008	4 th Quarter 2007	3 rd Quarter 2007	2 nd Quarter 2007		
17,022.373	17,635.052	22,108.792	17,292.529		
-10.7%	-2.9%	-2.2%	-3.1%		

Source of data: World Trade Atlas, U.S. edition, Global Trade Information Services