

# Natural Nuclear

*The new modernist mantra needs to be 'form follows function follows fabric', says Simon O'Connell. Never before has there been such a vast range of materials available, nor so many curious minds intent on bending the very fabric of the material world that we're surrounded by, and more importantly, that we depend upon for survival.*



*The polygonal segments of Project OR react to ultra-violet light so when in the shade the segments are translucent white and when hit by sunlight they become coloured, flooding the space with different hues of light. At night OR transforms into an enormous chandelier emitting an ambient light. Developed by architects and designers Ron Aronov, Francesco Bressa, Marco Carni, Christoph Klemm, Laura Miculicci and Elisa Oddone, [www.orproject.com](http://www.orproject.com)*



*Left: Oricalco shape memory shirt by Grada Zero. Espace can be programmed so the sleeves shorten immediately as the room temperature increases.*

## VIEWPOINTVIEW

*Boom or recession, ostentation or austerity, nostalgic or contemporary: whatever the mood, economic or designwise, the textile and fibre industry has continued to innovate in high-tech materials.*

*The list is long: new-generation polyesters and polyamides, hyper-fine but super-strong yarns, biopolymers, biomimetics and, above all, nanotechnology – a science that operates in a world below 100nm. It is a veritable brave new world, but are enough people interested?*

*When it comes to apparel textiles and associated areas, the answer, sadly, is no. Why? However much we innovate, it will only work when underpinned by new consumer thinking. At the moment, attitudes range from nostalgic to verging on the Luddite. We are bogged down in the concept of 'organic' and the notion that only that which is grown in a totally natural way or produced from natural materials can be good.*

*As far as textiles goes, the bad image of synthetics stretches back to the first oil crisis of the mid-70s, to a world of cheaply produced drip-dry shirts, transfer prints, polyester, double-jersey and acrylic sweaters: a world of static and harsh fabrics. It was also the time of giant corporations – ICI Fibres, Courtaulds, Monsanto, Montefibre, DuPont – who finally killed each other off by over-producing in a weakening market.*

*Today, we are living in a completely different world of smaller, specialised manufacturers. These are making products, not necessarily based on petrochemicals, that will help us all face the challenges of sustainability, limited resources and climate change. But it seems nigh on impossible to forget the past.*

*At the moment, smart textiles are having difficulty penetrating beyond engineering, military activities and high-performance sportswear. How many people understand the cradle-to-cradle properties of synthetic fibres, which are sustainable, last longer and are easier to care for?*

*It's all a question of public relations. Manufacturers would even like to erase the word 'synthetic' from 'textile speak' and use terms such as 'new fibres'. The problem is that these new, high-tech companies simply do not have the money to run marketing and advertising campaigns to broadcast the truth about SuperSynthetics.*

*But it's not all bad news. More creators are talking to scientists; in the design field, more 'new materials' are being sought to create totally innovative products. Even in the prehistoric world of fashion, more consumers are realising the perils of 'value' retailing and are looking for valid alternatives. And those have to include 'intelligent textiles'.*