Invisible T-shirt Breakthrough for Eco-Fashion Brand Rapanui

An eco-fashion brand has taken an innovative approach to the issue of transparency and traceability within the fashion industry by developing a new fabric that can make t-shirts appear invisible.

In partnership with the University of The Isle of Wight, eco-fashion brand Rapanui has taken the light transmitting properties of optic fibres and woven a jersey fabric to create an invisible t-shirt. The technology captures light on one side of a garment and relays it on to the opposite side.

Martin Drake-Knight, Designer at Rapanui explains:

"The research has been around for a long time but the principle is actually quite simple - to take light from the front of the garment and relay it to the back - and vice versa. Optic fibres are simply light conductive threads. They capture the light in the space immediately surrounding the garment and relay them through the threads. If you can direct this light directly out of the shirt, as we have done, the result is a vivid perception of invisibility."

The University of The Isle of Wight assisted with the project and hope to develop variants of the fabric for a wide range of applications. However Textiles specialist Professor Barry Green said it would be "quite some time" before the technology could come to market, adding that an early idea would be to make landfill sites invisible: "Sustainability is an out-of-sight, out-of-mind problem. We can throw invisible t-shirts in open-air landfill sites - or even just on the street - and nobody will know they are there."

In a recent interview fashion designer Wayne Hemmingway spoke of the Award-Winning eco fashion brand:

"What Rapanui is doing is game changing; they are at the forefront of fashion technology. People will see what they are doing and will want to copy it."

Rapanui Co-founder Rob Drake-Knight comments:

"We are delighted to announce this innovation; we hope it helps to raise awareness of transparency and traceability within fashion."

Watch a video of the invisible t-shirt and the science behind it here: www.rapanuiclothing.com/opticfibre Share the video or embed it in your website using this link: http://youtu.be/P6U19IPiI-A