



## Overview

### **What makes sweaty socks smell?**

It's not moisture but the bacteria that grow in the damp fabric. Fabric-bred bacteria aren't just a smelly sock problem. They are also responsible for hospital acquired infections affecting nearly 9% of hospital patients in both developed and resource-poor countries (World Health Organisation). This translates into 1.7 million hospital-associated infections in the US – causing or contributing to 99,000 deaths each year.

**Textilise™** prevents the spread of such deadly infections by enabling the production of antibacterial medical grade textiles, air filters and wall-panels.

## Technology

**Textilise™** is a final-step, cost effective, antibacterial nanoparticle finish for woven (or fibrous) thermoplastic polymer textiles such as polyester (PET), polypropylene (PP), polyvinyl chloride (PVC) and associated poly-cotton blends.

The practice of coating textiles with antibacterial nanoparticles is not new. However, a cost effective, scalable, continuous method for “locking-in” of the anti-bacterial nanoparticle into the textile so that one can wash the textile under hospital washing machine conditions without the need to replenish the nanoparticle has proven elusive.

The **Textilise™** coating technology addresses this unmet market need

## Commercial Opportunity

WHO Statistics show that there are 7.94 million nurses registered in Europe and USA. Assuming the average cost of a standard reusable uniform to be around \$40,



**Fig 1: Dangerous Bacteria commonly found Hospital uniforms:** *In a recent US Study, 65% of medical personnel confess they change their lab coat less than once a week, though they know it's contaminated. Fifteen percent admit they change it less than once a month. Superbugs such as MRSA can live on these polyester coats for up to 56 days*

a total annual value of \$634 million can be estimated for this segment alone. The University of Limerick is interested in seeking partners to exploit the commercial potential this patent pending technology by entering into licensing and collaboration arrangements that mutually benefit both parties.

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