

Wanted: Clothing that kills bacteria

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Professors at Wilkes University are hoping to design a process that turns ordinary clothing into bacteria-killing apparel by use of nanotechnology.

The researchers at the Wilkes-Barre, Pa., school also want to invent infectious-disease-sensing uniforms that detect the presence of a biological agent.

The ability to coat fabrics with nanoparticles allows the creation of bio-functional coatings for applications such as improving fire retardant properties, and monitoring blood sugar contained in perspiration.

Wilkes-Barre engineering Professor Ali Razavi and colleagues have received a \$120,000 grant that will be matched by Wilkes to design and market a 12-inch roll-to-roll machine capable of coating fabrics with nanopowders of various materials. The project is scheduled to be completed within 12 to 18 months.

Nanopowders are particles with a diameter of less than 1 micrometer. That means such particles cannot be seen with the naked eye because they are closer to the size of a virus.

The grant requires the products be brought to market by establishing a start-up business. That will involve students in development and commercialization of the product.

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