

IIT-D startup Medicfibers develops antimicrobial solution Viroclog

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Provides long-lasting protection against HAI by reducing viruses, bacteria, fungi survival on fabric



Medicfibers, an Indian Institute of Technology Delhi (IIT-D) incubated startup, in collaboration with AIIMS New Delhi, has developed an antimicrobial solution Viroclog that when applied as a coating on textiles, provides long-lasting protection against hospital acquired infections (HAI) by reducing viruses, bacteria, fungi survival on fabric.

Coating the Viroclog on textiles lowers the surface energy preventing adhesion of microbes and destroying the membrane integrity of microbes. Destruction of lipid-based membrane barrier makes the microbes inactive, thus preventing infection transmission.

The basic significance of this technology is to save lives and reduce healthcare-associated costs by integrating antimicrobial technology with hospital clothing that provides a layer of protection against microbial pathogens. The tests done by AIIMS New Delhi, IISc Bangalore, and multiple NABL accredited labs, show that Viroclog technology contributes significantly to reducing infections through antimicrobial hospital clothing.

"The existing market players primarily rely on Ag-coated nanoparticles, while ViroClog is significantly different, possessing broad-spectrum antimicrobial properties. Secondly, while currently available solutions offer coating protection up to ~50 washes, the patented ViroClog solution in multiple laboratory testings could provide protection lasting more than 100 washes demonstrating high durability. ViroClog solution reduces infections," Harsh Lal, Founder, Medicfibers said.