

Nano Science, Technology and Industry Scoreboard

## IIT Madras Startup Subsidiary Launches Nano Textile Coating to Inactive Coronavirus

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A subsidiary of a tech startup incubated by IIT Madras has launched a nanotech coating for textiles that can inactivate the novel Coronavirus within five minutes of contact.

It continuously destroys or inactivates viruses as small as 30 nanometres and other microbes. At present the particles can be coated on materials like cotton, polyester and cotton – polyester.

A study conducted as per international standards with a U.S.-based independent laboratory showed that the antiviral coating inactivated 99.99 per cent of the coronavirus 229E within five minutes of contact time.

The coating lasts upto 60 washes at 70 degrees Celsius and does not show any leaching of chemicals. Tests have also shown that it is non-toxic to human cells and is comfortable to use.

Based out of Bangalore, the startup -<u>Muse Nanobots</u>-plans to establish three more coating facilities in different cities to cater to demand by the end of September.

The startup is also targeting installation of the nano coating machine in textile companies that make regular office and casual attire, sportswear, PPEs, home furnishings and packaging material by end of 2020.

With all its supply chains based in <u>India</u>, the startup says the coating is a 'Make in <u>India</u>' product fulfilling Prime Minister Narendra Modi's clarion call of 'Atmanirbhar Bharat'.

As the economy begins to open up after months of lockdown, nanocoated textiles can offer enhanced protection for common people to travel and provide safety to frontline healthcare, hospital, hotels and restaurant workers.

