BioSpectrum
the business of Bi
24 years of leveraging the business of Bio
www.biospectrumindia.co

inStem develops germicidal fabric technology for face masks

30 November 2020 | News

This technology has been shown to inactivate viruses and bacteria upon contact



An innovative germicidal fabric technology developed in the laboratory of Praveen Vemula at the DBT-Institute for Stem Cell Science and Regenerative Medicine (DBT-inStem) Bangalore, has been used to coat fabric that has been launched as face masks. Dr Praveen Vemula's group intensified the development of the germicidal coating in April of 2020, as part of the national effort, led by the Department of Biotechnology, towards the current COVID-19 pandemic.

This technology has been shown to inactivate viruses and bacteria upon contact. In the laboratory, the G-fab technology achieved a 99.99% reduction rate against a wide range of enveloped viruses, including SARS-CoV-2, the causative agent of COVID-19, the influenza virus (H1N1 flu), as well as both gram-negative and gram-positive bacteria. A non-exclusive license to Color Threads, a company based in Tirupur, and an incubate at the Centre for Cellular and Molecular Platforms (C-CAMP), has enabled the rapid transfer of this technology, and the development of a germicidal fabric called, G-fab 99+ antiviral.

DBT-inStem has issued a non-exclusive license to a Tirupur-based Indian company called Color Threads. Incubated at the Centre for Cellular and Molecular Platforms (C-CAMP), the company has further refined the technology to make it market-ready through bulk scale production and setting up manufacturing capacity. Color Threads has also collaborated with the Aditya Birla Fashion and Retail Limited (Van Heusen) to manufacture and market the masks to reach the pan-India population.

DBT-inStem forms part of the Bangalore Life Science Cluster, an innovative institutional model for cutting-edge scientific research. The vision of the Cluster is to have an integrated multi-disciplinary and interactive bioscience and technology research enterprise, which will result in path-changing scientific discoveries, and the translation of these into tangible technological advances.