

DBT- InStem develops novel germicidal protection for PPE:

Dr.Praveenvemula's lab at DBT-Institute for Stem Cell Science and Regenerative Medicine (inStem) has developed a proprietary germicidal molecule, which could be used to produce anti-germ face masks and other personal protection material (PPE). This molecule can be covalently attached to any type of cotton fabric including household cotton and the fabric can then be stitched into PPE such as a facemask. The molecule is effective against both Gram positive and Gram-negative bacteria and even enveloped viruses. Research and testing has concluded that this compound remains attached to the fabric for up to 25 cycles of standard detergent wash (industrial grade) at least. One can use such 'germicidal' masks efficiently and repeatedly without much fear by just cleaning them with regular soap wash at home or dipping them in boiling water for five minutes and drying, thus resulting in better waste management and environmental pollution. This compound can be scaled at the industrial level.

