Nanoparticle based Antibacterial coating developed by scientist at C-MET, PUNE for stopping the spreading of CORONA virus

The scientists at C-MET, Pune have developed antiviral and antibacterial coating for the masks and all sort of garments used in the healthcare related products. The coating is based on Metal/Metal oxide nanoparticle formulation suspension. Each mask requires 50 to 70 mg of nanoparticle coating. This coating is a special type of coating and can be coated easily on any substrate. Thanks to Dr Sudhir Arbuj, Sc.B for his utmost contribution along with our supporting team Dr Govind Umarji, Reshama Ballal, Mr Avinash Vishwakarma and Director C-MET, Pune.



Photo shows the three types of mask, left side are without coating and right side are nanoparticle coated mask.

Dr. Sudhir Arbuj has informed that the nanoparticle coated mask and cloths, not only interrupt the path of viruses to enter in a person's body but also destroy the viruses. These kind of masks and cloths will play an important role to stop the spread of corona virus and would also help the people who are fighting in the forefront against this pandemic (i.e Doctors, nurses, police force etc). CORONA virus remains active in the air from a couple of hours to few days and a majority of the people get infected by coming in contact with such surfaces unknowingly. This nanoparticle based antiviral coating will play an important role in stopping the spreading of CORONA virus. Director of C-MET, Pune has mentioned that the developed coating is quite economical and the nanoparticle coating on the surface of mask and cloths are quite stable up to 7 to 8 washings (further leaching study is under process.) Looking at the current scenario, C-MET Pune is planning to produce 200 masks for the staff. The further work and production will be taken up in collaboration with Yashwantrao Chavan

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