

Development of Antiviral Nano Coatings for PPEs and N95 Masks

Collaboration

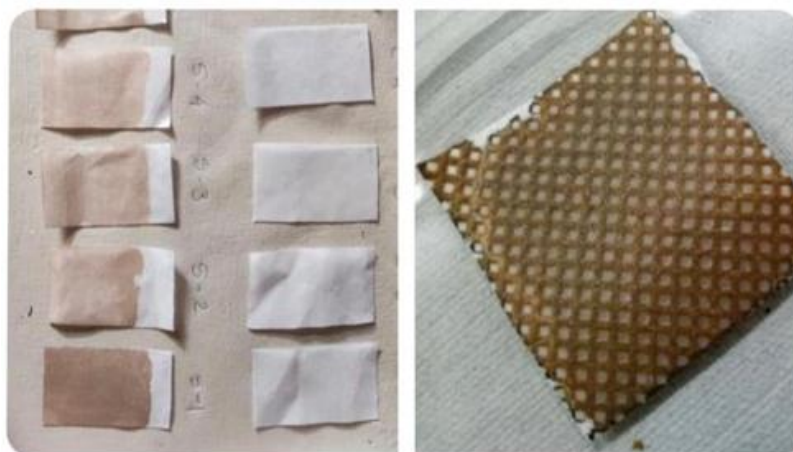
- Department of Chemistry, University of Mumbai
- Swachh Urja Alliance, Mumbai



On one hand the number of people infected by COVID19 is increasing sharply throughout the world, infections and deaths of doctors and support staff treating and serving COVID19 patients is also becoming a matter of concern and worry. In this context Dr Vishwanath Patil of Department of Chemistry, University of Mumbai in collaboration with Dr Sunil Peshane of Swachh Urja Alliance, Mumbai along with one of their PhD students Roshan Rane have jointly developed new Antiviral nanotechnology based coatings for application on PPEs and N95 face masks that are used by doctors and support staff while treating and serving COVID19 patients.



The coatings are based on specially designed medical grade polymer and nanoparticles of certain metals with no use of any harmful chemicals. The interesting part of these antiviral coatings is that, they can be synthesized within 4 hrs and dry in hardly 15 min after application on PPE material.



The coating can be used to destroy corona virus adhered to PPEs and face masks, thus avoid infections to the doctors and support staff and may help to save their lives. All the preliminary coating properties of these antiviral coatings are already done at laboratory level. Both the researchers are trying to send these coating samples for further investigation to test their antiviral efficacy at the earliest. The samples are to be tested rigorously in BSL3/4 level virology laboratory located at National Institute of Virology, Pune which is supposed to be the only lab in the country to deal with research on viruses. Recently this project has been submitted to DST, Delhi

Researchers



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Related media news links

<https://timesofindia.indiatimes.com/city/mumbai/mumbai-doctors-may-soon-be-dressed-to-kill-virus-thanks-to-nanotech-research-at-varsity/articleshow/75592031.cms>

https://maharashtratimes.com/maharashtra/mumbai-news/the-doctor-will-be-safer/articleshow/75581160.cms?utm_source=Whatsapp_Wap_stickyAS&utm_campaign=mtmobile&utm_medium=referral

<https://www.lokmat.com/mumbai/university-mumbai-develops-antiviral-nano-coatings/>

<https://www.marathiebatmya.com/covid-19-university-of-mumbai/>

<https://youtu.be/RiT631R0h0>

https://twitter.com/uni_mumbai/status/1257988453536600064?s=12