

# **ANANYA: Disinfectant Spray** **developed by Defence Institute**

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The Defence Institute of Advanced Technology in Pune has developed a nano-technology based disinfectant spray to combat Covid-19. The formulation, which has been named Ananya, is effective in disinfecting all types of surfaces, developers said.

“The material can be used on masks, PPEs, hospital linens, and other likely contaminated surfaces like medical instruments, elevator buttons, door knobs, corridors and rooms,” DIAT said in a press statement.

## **Key Highlights**

- The material has been developed by synthesizing silver nanoparticles and a commercially available drug, Ampicillin...Properties of this material have been tested by two methods - Nuclear Magnetic Resonance Spectroscopy and Infrared Spectroscopy.
- The formulation has the ability to neutralize the outer protein of the virus and the silver nanoparticles have the ability to rupture the membrane of the virus, thereby making it ineffective. We will be filing for a patent and talks are on with industrial entities for large scale manufacturing of the material through transfer of technology.
- Developers said the ‘nano-technology assisted formulation’ has abilities to stop the coronavirus from entering the human body, and neutralize the virus when it comes in contact with this formulation layer.
- “This is a water based spray and will be effective for more than 24 hours. This formulation adheres very effectively to fabric, plastic and metallic objects, and its toxicity to humans is negligible. The shelf life of the spray is said to be more than six months. Commercial production of this spray is in progress. It will be available in various sizes...” DIAT’s press

statement stated.

**SOURCE:** *The Indian Express*