

Proposed Research Title

Exploratory Applications of Nanotechnology for pandemic Infections & Protection Using Copper Nanowire

Covid-19 is new pandemic infectious era affection our human life.COVID-19, caused by SARS-CoV-2 infection, and has been prevalent worldwide for almost a year. However, no clear explanation for the spread of SARS-CoV-2 and a massive increase in the number of infections has yet been proposed. The solutions to overcome this pandemic are the development of awareness and take some precautionary steps to safeguard ourselves by some precautionary methods through Nanotechnology Materials. The proposed title deals with how we can apply the copper Nanotube in our life for protect our self during pandemic situation in all the time. The current COVID-19 health crisis has highlighted the crucial role of submicron-sized airborne particles and particulates in the spread of infectious respiratory diseases. The virus that causes COVID-19, SARS-CoV-2 (Severe Acute Respiratory Syndrome Corona Virus 2) is itself very small and measures around 0.1 μm across. Copper Nanowire that has been transformed into foam can filter submicron-sized airborne particles. Through the research in order to obtain the filtration mechanisms that may further improve the foam's filtration efficiency and enhance new functionalities in prototype filtration systems the application of Nanowire materials, which is lightweight, resistant to chemicals and easy to clean, reuse and recycle, could be used in face masks as well as air cleaners to help in fight the COVID-19 pandemic.

Key words: SARS-CO-V-2, Nanotechnology, Copper Nanowire, Airborne particles.

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