

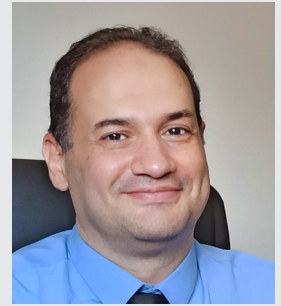
# A New Generation of Disinfection Products

Prepared by

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## Key Takeaways:

- The current antiviral/antibacterial surface coating solutions are not suitable for a post-covid-19 world due to their many disadvantages that decrease their consistent effectiveness.
- The surface coating market size is huge and expected to grow, but a new generation of surface coating products is necessary to fulfil the market needs.
- GP Tech is becoming part of the emerging global strategy in developing new surface coating products by utilizing the latest advances in nanotechnology and biological sciences.



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## Market Size:

The global antiviral/antibacterial coatings market size was valued at 3.3 Billion USD in 2020 and is projected to grow at a compound annual growth rate (CAGR) of %10.7, reaching 5.6 Billion by 2025. The demand for antiviral/antimicrobial coatings can be attributed to the increasing awareness about safety and hygiene due to the COVID-19 pandemic.

Demand for antiviral/antibacterial coatings products has surged since 2019, specifically in the medical and health industry, and suppliers are encountering high demand from other sectors as well such as air conditioning & ventilation, sanitary facilities, food processing & packaging, construction, textile and many others as seen in fig (1).

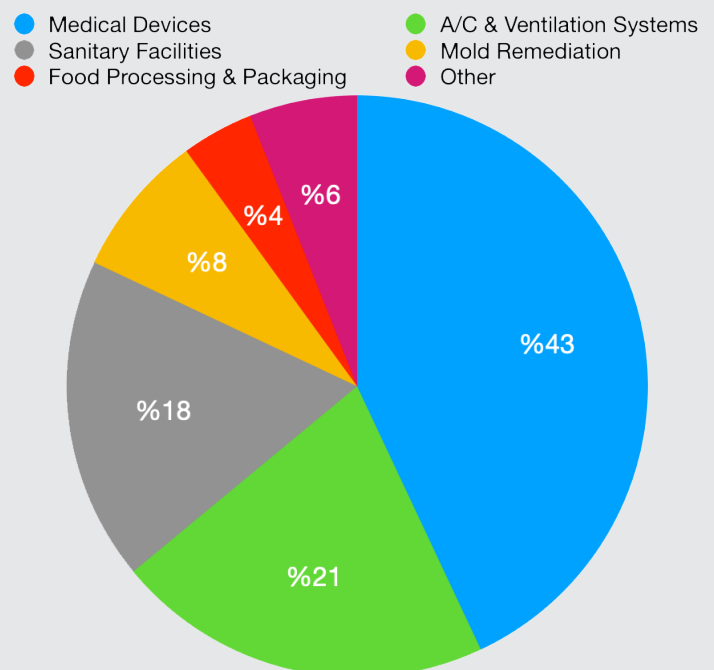


Fig (1): Global antimicrobial coatings market share by application in 2019 (%)

Source: [www.statista.com](http://www.statista.com)

## Background:

Antiviral/antimicrobial coating materials such as Copper have been used for health purposes since the ancient times of Egypt, Roman, Greek, and Persian civilizations. Copper is well known for its ability to kill even superbugs (bacterium). Using copper alloy on regularly touched surfaces can result in a 90% reduction in the numbers of bacteria. Furthermore, scientists found out that the infection rates were reduced by 58% in patients' rooms with components made of Copper. However, Copper's few downsides make it an outdated material for antimicrobial use. First, it cannot be applied on all surfaces and can only work on metals. Second, its stiffness and toxicity and finally, it is costly when compared with other alternatives.

Another coatings alternative is UV light. Its pathogen kill rate is above 99.9% and suitable for any climates and surfaces. It can be used in various places such as hospitals, medical labs, fire & police stations, transit stations, schools etc. Nevertheless, UV light technology is highly toxic and cannot be applied when there are people around. Additionally, due to its low durability rate, workers have to use it frequently to ensure consistent protection.

Other antiviral/antibacterial coatings materials in the market have their standard and unique advantages. New solutions either have short term effects or longer impact duration. Common issues such as cost, time, applicability, and toxicity still act as boundaries regarding using those materials as a primary solution. The post-Covid-19 market needs a new generation of antiviral/antibacterial products that are highly effective and easy to handle, have long-term efficacy, and can be applied on all types of surfaces.

## GPTECH Role:

For the antiviral/antibacterial coatings market to be better prepared for a post-Covid-19 world, we at GP Tech have partnered with two prestigious scientific institutions to develop a product that covers all the crucial features and satisfy the market needs by integrating nanotechnology and biological sciences.

Our research product can be essential where macrobials and viruses are of significant concern. Its impact is immediate, preventing the virus growth; it can last from 6 months to 2 years depending on the surface, and, above all, it has a lower cost compared to other coating alternatives. As a result, workers can use our product to coat various types of surfaces like doorknobs, windows handles, stainless steel, aluminum surfaces, glass and plastic. Additionally, scratches and surface wear don't adversely affect the coating's hygienic properties.



## About Us:

GPTECH is a part of GP Holding a multinational entity with diverse investment in different sectors. GP Holding is currently operating in Turkey, KSA, UAE, Iraq, Egypt, Kenya, Malaysia, and the USA.

GP aims to be a leading company in each sector of its diversified portfolio. GP Holding manages investments in six main sectors: energy, estate development, trading, services, oil & gas, and hotel management.

GP Holding's strategy is to invest in industries with high growth potential during the next five years with the ultimate goal of enlarging its investment portfolio and maximizing benefits for all shareholders and stakeholders.

GP Tech has been investing in R&D Projects with a huge budget to create feasible and applicable technologies in the sector of Nano Technology. Having such willingness and determination to do so has helped us accomplish a lot in this field quickly.

We leverage rich technical expertise and a solid academic network. We develop advanced technology solutions tailored to clients' requirements, whether designing a new product or process; or enhancing an existing technology.



**Sherif Desouky, PhD**  
CEO, GP HOLDING

**In cooperation with DU University in Turkey, we strengthen the modern research infrastructure on campus, facilitating access and cooperation with the concerned authorities and government institutions. We also have many partnerships in the field of well-equipped research laboratories in many places around the world in Saudi Arabia, India and Canada, with extensive research facilities and capabilities.**



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