

AIC Life Sciences develops dual anti-bacterial and UV blocking glass technology

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An innovative dual anti-bacterial and UV blocking glass technology developed by the Surat-based Start-up AIC Life Sciences is beneficial in the current pandemic to cope up with infections.

Further, technology improves the health hygiene standard in various places such as hospitals, restaurants, offices, ophthalmic glasses, etc. Dr Chintan Bhagat, a key scientist, of AIC Life Sciences, identified the need for developing an anti-bacterial coating in April of 2020 as part of the global effort towards the current COVID-19 pandemic.

The technology has been shown to inactivate bacteria upon contact. In the laboratory, the glass achieved a 99.99% reduction rate against gram-negative and gram-positive bacteria. Further, glass able to block UV radiation (270nm-400nm) which can be used in UVC based sanitising apparatus to prevent the harmful effect of UV radiation to the user which is widely used nowadays due to the COVID-19 pandemic. Further, prolonged exposure to UV-A and UV-B radiation causes harmful effects on the eye and skin.

The technology develops a micron level layer on the glass surface which is resistive to alcohol thus offer a permanent anti-microbial effect and will be useful in hospitals, restaurants, and offices. Further, the coating is free of Volatile Organic Compounds (VOCs). Moreover, the formed layer is free of any antibiotic thus reduce the chances of the emergence of resistant bacterial species in long-term use.

The technology is easy to process and easy to integrate into any glass manufacturing unit. AIC Life Science looks for a partner to commercialise the technology for large scale application. AIC life Science can provide an exclusive license for adopting technology.