

Nano Science, Technology and Industry Scoreboard

Cupprom Introduces New Self-disinfecting Technology

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Cupprom is a solution provider of nanotechnology innovations in the UAE. One of the latest innovative solutions provided by Cupprom is a permanent anti-microbial nano-coating solution.

The surface coated with the solution will be self-disinfecting around the clock, which will last for a duration of minimum 12 months.

This innovative solution has been awarded by Dubai Future Foundation's <u>Aviation X Lab</u> in their Accelerated Traveler Wellbeing Challenge competition among a total of 107 participants from across the globe in the challenge.

The product gets activated by any light that makes it perfect for indoor and outdoor applications. It's harmless for humans and can be re-applied every 12 months. The nanocoating technology is also resistant to high and low temperatures and offers a great and safe alternative to manual sanitation. The main benefits of the solution are:

- Disinfection around the clock 24/7,
- No chemical effect and harmless for human,
- No corrosion on the surface material and sustainability,
- No damage to ecosystem and Environment friendly,
- No extra cost of sanitization and savings on man-power.

The coating quickly gained popularity across Europe and is being used to fight Covid-19 in thousands of locations across the continent. According to a study conducted by the <u>University of Tampere</u> in <u>Finland</u>, the photocatalytic coating technology destroys 98 per cent of influenza and coronavirus, among other infectious microbes, within two hours. The coating is sprayed across all touchpoints, which takes 24 hours to activate after application in the indoor lights.

The innovative nano-coating increases hygiene and safety levels of public spaces where millions of bacteria, viruses, yeasts, and moulds thrive. It reduces the need for manual sanitation, thereby lowering costs, and guarantees round-the-clock disinfection without human intervention.

It also improves the air quality of closed spaces, has zero harmful chemicals, and does not damage or corrode assets. It is easy to apply on all surfaces such as wood, steel, plastic, glass, leather, and fabric. It makes use of photocatalysis in which light initiates a chemical reaction and releases reactive oxygen species that react with and destroy microbes on any given surface.

Read the original article on Khaleej Times.