

Researchers release masks that instantaneously deactivate SARS-CoV-2

September 20 2021



Credit: Asociacion RUVID

The Catholic University of Valencia and Valencian company Visor Medical, manufacturer of preventive health technology for innovation, have released a type IIR surgical mask with an intelligent fabric that can



instantaneously deactivate the SARS-COV-2 virus that is responsible for COVID19.

The intelligent <u>fabric</u> of these <u>masks</u> has been created thanks to the work of a team of researchers from the CITSAM-UCV led by professor Ángel Serrano. Said fabric, as well as deactivating the SARS-COV-2 virus, also neutralizes other enveloped viruses, such as the one that causes the flu, and <u>antibiotic-resistant bacteria</u> such as Staphylococcus aureus and Staphylococcus epidermidis, which are resistant to methicillin.

From Visor Medical, CEO Maravillas Viudes says that the line of UCV Research-Visormed surgical masks with intelligent fabric will be on sale in both adult and child sizes. These intelligent masks, manufactured following the UNE-EN European standard, will be on sale in coming days.

Research at the service of society that continues bearing fruit

These intelligent masks are part of the alliance between both entities with the commitment to serve society in its fight against the pandemic. A commitment that became a reality last May when the FFPCOVID MASK was launched and which is now complete with the <u>surgical masks</u>, which are very affordable so that all families can access them.

A spokesperson for Visor Medical, which manufactured and will market them, says that the masks were created thanks to the research performed since the beginning of the pandemic by the Laboratory of Biomaterials and Bioengineering of the UCV, of Ángel Serrano. The researchers of this laboratory, who belong to the CITSAM-UV, were able to develop intelligent filters with inactivating capabilities, which these masks now use.



This new health technology represents "a step forward" in protection against the pandemic, as the conventional masks that most of the population uses "do not have antimicrobial properties, and only prevent the virus from reaching the respiratory tract," says Serrano. "We wanted to go further and develop a mask that also had the ability to destroy the virus as soon as it comes into contact with the fabric. We also saw that our filter was effective against multi-resistant bacteria that cannot be destroyed with antibiotics and represent a threat, especially for health staff."

"Furthermore, these masks have the advantage of protecting in two directions: protecting healthy people from becoming infected and keeping infected people from releasing as many active viruses. As it inactivates most of the microorganisms we expel when speaking, it also has the benefit of being a technology that leads to significantly less infectious waste from being produced," he added.

Provided by Asociacion RUVID

Citation: Researchers release masks that instantaneously deactivate SARS-CoV-2 (2021, September 20) retrieved 3 May 2024 from https://medicalxpress.com/news/2021-09-masks-instantaneously-deactivate-sars-cov-.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.