

How an air filter made by University of Houston researchers could trap and kill COVID-19 germs

Catch and kill — that's the mission of a new air filter designed to eliminate [COVID-19](#) virus particles.

A courtyard outside the University of Houston's College of Technology remains empty Tuesday, March 31, 2020, in Houston.

Heated foam air filters created by University of Houston physics researchers and Medistar, a Houston real estate developer specializing in medical buildings, could be key to disinfecting heating and cooling systems of the SARS-CoV-2 virus that causes COVID-19, according to a peer-reviewed study in *Materials Today Physics*, a science journal.

The virus can live up to three hours in the air, according to [recent research](#). But superheating could kill the virus when passed through the filter, which would be installed in air conditioning and heating systems and heated to nearly 400 degrees Fahrenheit.

Those filters could be in production as soon as August, said Zhifeng Ren, the director of UH's [Texas Center for Superconductivity](#), which researches materials that can conduct electricity without resistance at high temperatures. Ideally, high-traffic spaces and essential services in Texas, such as airports, office buildings and [schools](#), would be the first to install them.