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Hong Kong develops anti-virus 3D printing material to rapidly terminate COVID-19

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A resin material with high anti-virus performance



An interdisciplinary research team from The Hong Kong Polytechnic University (PolyU) has successfully developed the world's first “anti-virus 3D printing material” that can kill the COVID-19 virus on surfaces as well as most common viruses and bacteria.

The main component of the material is resin, added with anti-viral agents such as cationic compounds, to damage the membrane of the virus and destroy its structure to kill the virus and bacteria.

Dr. Kwan Yu Chris LO, Associate Professor of PolyU's Institute of Textiles and Clothing, who led the research team, said that laboratory tests confirmed the material can kill 70% of the COVID-19 virus and other viruses/bacteria surviving on a surface within two minutes; eliminate over 90% of viruses within 10 minutes; and terminate almost all viruses and bacteria on a surface in 20 minutes.

The team has already applied patent of this technology and application, and will use it for commercial purposes in future.