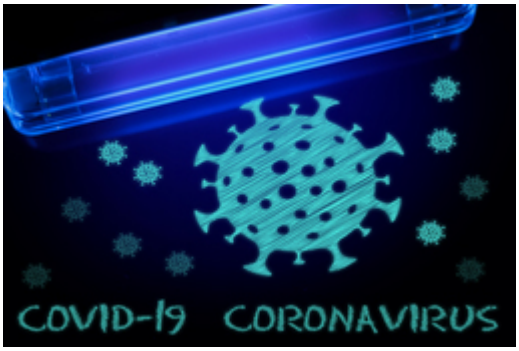
INNOVATION PARTNERSHIPS
UNIVERSITY OF MICHIGAN

Shop Tool Sanitizing Drawer

TECHNOLOGY NUMBER: 2021-116



Technology ID
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Category
Hardware
Engineering & Physical Sciences

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OVERVIEW

Employs UV-C light to thoroughly and efficiently sanitize small to mid-sized tools and objects

- Preliminary testing suggests that this method might be effective at killing COVID-19
- Efficient 10-minute sanitizing process

BACKGROUND

Ultraviolet (UV) light is emerging as a common method for disinfecting surfaces and various high touch objects. A number of UV wands, cabinets, and other lighting systems designed to sterilize objects currently exist on the market. These include inexpensive consumer cabinets that sterilize small items used in the home, such as cell phones, keys, and small toys, as well as larger, more expensive industrial grade units that sterilize medical equipment. However, there is a gap in the market for economical, mid-sized sanitizing units that can disinfect high-touch objects in high traffic settings such as workshops, schools, libraries, and labs.

INNOVATION

Researchers at the University of Michigan have developed a sanitizing drawer that employs UV-C light to thoroughly and effectively kill viruses and other microbes on small to mid-sized tools and other high-touch objects. The drawer is lined with a satin-finished aluminum to ensure even light distribution, as well as a sanitizing timer to ensure appropriate exposure. Furthermore, the drawer is properly sealed to ensure no harmful light escapes. The sanitizing drawer can be manufactured at a price point well below other similar industrial-grade units that are currently being used in healthcare settings. Initial testing with UV-C cure strips indicates effective germicidal irradiation and suggests possible effectiveness at killing COVID-19. Additional microbiological testing us underway.