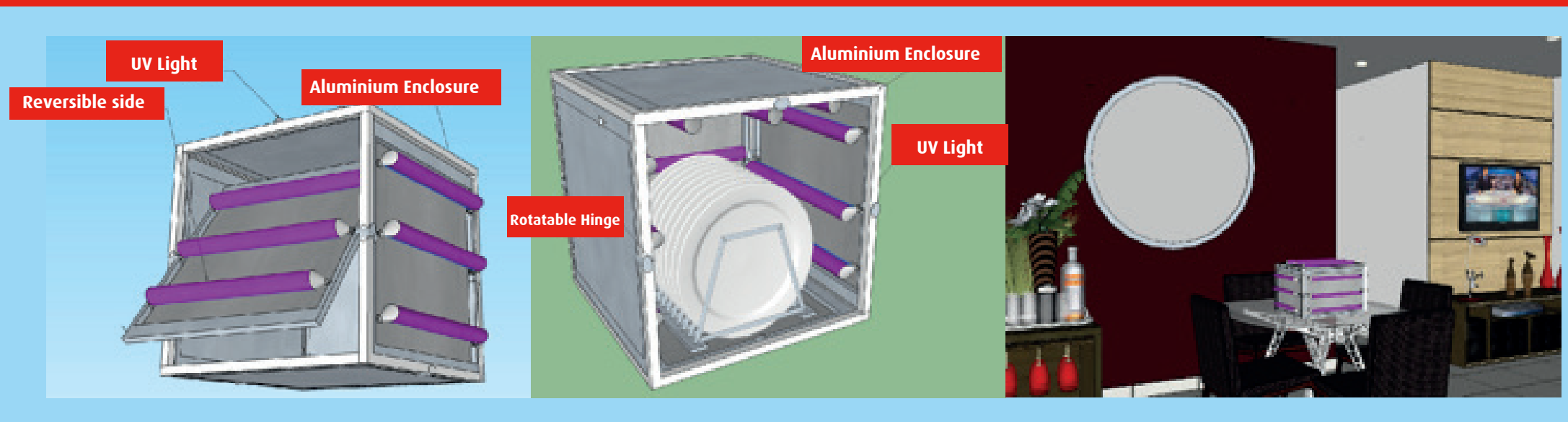


DISINFECT

UV Decontamination Multi-purpose Chamber

"Think inside and outside the box"



Aim of Project

Though germicidal Ultraviolet (UV) light technology has been around for many years, and widely deployed in hospitals, the pandemic COVID-19 crisis has seen the technology been applied in many other settings such as hotels, schools, offices, etc, to counteract the SARS-CoV-2 virus. We have seen new innovations such as UV robots, which can move autonomously in hospital settings, and smaller UV disinfection chambers for more personal cleaning. We seek to combine exterior and interior cleaning in one device, with our prototype DISINFECT unit which can be used for room disinfection, and with rotating side panels can also transform into a personal UV disinfection chamber. We will be prototyping our concept in various sizes-the enclosure will be built from aluminium, with UV-C lamps fixed to each side, which can rotate to provide maximum exposure externally and internally, whilst the system will be computer controlled, to ensure that no person is present during exterior disinfection modes, as UV-C is a known carcinogen for human skin. The innovative aspect has many applications, and for example we see it particularly useful in hotel settings. The project is a collaboration between the IEEE Mauritius Section and Middlesex University Mauritius.

Project Value (Rs): 300,999

Amount funded by MRIC (Rs:) 285,999

Ultraviolet (UV) Light Disinfection

All bacteria and viruses (including various coronaviruses) respond well to Ultraviolet UV-C disinfection. It has been noted that UV-C light sources can inactivate 99% of SARS-CoV-2 virus on a surface with an exposure time of around 5 seconds.

What is UV-C technology?

UV light is invisible to the human eye and is divided into UV-A, UV-B and UV-C. UV-C is found within 100-280 nm range, and a typical UV-C lamp's germicidal action occurs at 254nm

Special Call for Proposals:

Fast-track innovative projects to counter the impacts of COVID-19



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