

DESIGN AND CONSTRUCTION OF ROBOT STERILIZATION BASED ON UV-C LIGHT AND ARDUINO

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ABSTRACT

Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) or commonly called COVID-19 is a new virus that attacks respiratory tract infections. This COVID-19 case was first reported in December 2019 in Wuhan City, Hubei Province, China. On March 11, 2020, the World Health Organization (WHO) declared the spread of COVID-19 a pandemic. Transmission of Covid-19 infection can occur through droplets carried by the fingers and then into the eyes, nose and mouth. So how many efforts have been made to prevent COVID-19 by wearing masks, washing hands, maintaining distance, not crowding, and disinfecting or sterilizing rooms and objects around to minimize transmission of COVID-19. One way to disinfect or sterilize a room is to use a UV-C light lamp. UV-C light is one of the materials that can prevent or kill microorganisms. This study aims to provide an option to prevent the spread of the virus to the public by sterilizing the room. The basic methods used for this research are problem identification, literature study, system design, component collection, component installation, tool testing, evaluation and improvement, and report generation. This research produces a room sterilization robot with a mobile UV-C light so that it can make it easier for users to sterilize the room.

Keywords: *COVID-19, UV-C Light Lamp, Room Sterilization.*