

OZONE GENERATOR DEVICE FOR COST-EFFECTIVE AIR AND SURFACE DISINFECTION

Advanced ozone generation technology offering a cost/benefit advantage when compared with existing technologies. Wi-Fi enabled allows for secure remote control, remote monitoring and predictive maintenance.

Technology Overview

Innovators at NWU developed advanced ozone generator technology for use as a rapid and low-cost disinfection solution. The ozone generator can also be applied to treat water and fresh produce. During the COVID-19 pandemic many organisations found it challenging to clean large open public spaces. This inspired the design of a compact electronic device able to produce ozone that can effectively disinfect areas and air. The device can also be used to disinfect cars, busses and trains. As the technology is affordable to manufacture it can also treat household water in rural areas with limited access to electricity, through using a small solar PV panel.

The new technology combines internet of things capable sensors with the generation technology to create a smart sensing product able to automatically control the amount of ozone generated and deployed in a specific area.

Market Opportunity

This ozone generation technology combined with the smart sensing functionality can be the solution for long-term cost-effective disinfection for all industries. It is well known that Ozone kills all viruses, bacteria and fungi. Additional to the air treatment possibilities, this technology can also be used for water treatment and fresh produce applications.

Technology Benefits

- Wi-Fi enabled - allows for remote control and monitoring with predictive maintenance functions. Over the air updates to hardware.
- Smart sensing - allows for automatic sensing and control of the generator to ensure adequate levels of ozone is deployed for disinfection purposes.
- Unique components allow for a low cost high yield solution. No need for continuous chemical

Project status

Currently testing in a real operating environment.



Contact: North-West University Technology Transfer & Innovation Support Office

FR Bezuidenhout:+27(0)18 299 1679

FR.Bezuidenhout@nwu.ac.za