
Abstract

Using the dielectric barrier discharge, an ozone generator is developed. The system is used for pathogen removal in different environments. A series of experiments are conducted for controlling growth of bacteria on agar filled petri dishes. In each experiment, bacterial colonies growth under the ozone environment is compared with the colonies growth in the ozone free region. It is observed that the bacterial colonies grow exponentially in the ozone free region but the growth is drastically reduced when the petri dishes are present in the ozonated room. The growth of colonies is suppressed with the reduction in ambient temperature. The ozone is successfully employed for making a hotel room odor free that initially was filled with bad odor. The system worked quite well for making a poultry shed odor free. The odor is not re-generated if the chick's waste was removed before the ozone procedure.