

**Intel International Science & Engineering Fair 2014
Los Angeles, USA**

ABSTRACT

Project No.: Intel2014_012

Title: Electrostatic Sanitizer

a) purpose of the experiment

Air pollution is threatening to our health so we are going to invent a machine to kill bacteria and clean the air.

b) procedures used

First, some information was found in the Internet that some materials can be used to kill bacteria effectively and safely. Second, a viable machine was made to decrease the rate of food spoilage. It could draw out the smoke effectively by using copper coils and electrostatic device. Finally, an improved design of electrostatic sanitizer was made for more environmentally-friendly and cheaper at cost.

c) data

Copper is found to kill bacteria effectively. Static electricity can boost the power of killing bacteria greatly if it is used with copper coils.

We performed various experiments to verify the workability of our invention.

From our findings, it could reduce the amount of the indoor pollutants or allergen in the air in order to provide fresh air. Also, it could kill the bacteria as to extend the storage time of the food.

d) conclusion:

We create a machine that can extend the food preservation time and clean the air.