

CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s)

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Project Number

J0515

Project Title

The Effects of Monochromatic Radiation on the Decomposition Rate of H(2)O(2)

Abstract

Objectives/Goals The objective of this project is to find out an effective method to decrease the amount of environmental pollution that happens from improper use of hydrogen peroxide.

Methods/Materials

The whole procedure took place in a dark room in order to get the best results from the experiment. The colors used in this experiment were red, yellow, green, blue and purple. According to the measurments, the average numbers for every color calculated and converted to graphs to see the effects of light spectrums to the decomposition of hydrogen peroxide.

Results

Red light decomposed hydrogen peroxide more than the other colors. The least effective light spectrum on decomposition was violet.

Conclusions/Discussion

Our research showed us that the decomposition rate of H2O2 is inversely propotional to the light wavelength

Summary Statement

It was about watching H2O2 decompose with different colored lights of the light spectrum.

Help Received

My teacher helped me with project, he was my sponsor and helped me with it. He went over the grammar of my research paper. My principal and teacher went over the scientific part of my research paper. My teacher's friend checked the computer part of my research paper. Last my teacher's wife supported me.