

CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

Name(s)

Amanda S. Dawley

Project Number

J0608

Project Title

Can We Stop Corrosion?

Abstract

Objectives/Goals

The goal of my project was to stop or slow the rate of corrosion in a saltwater electrolyte using either magnets or petroleum jelly.

Methods/Materials

AC/DC transformer multimeter digital scale metal test strips magnets petroleum jelly alligator clips & wire camera

Results

All test results showed corrosion. Each test was weighed before and after to determine change over 20 hour period. The control test and magnet test lost about the same amount of metal. The petroleum jelly test lost less metal than other tests.

Conclusions/Discussion

Magnets had no effect on the rate of corrosion as compared to the control test. The petroleum jelly prevented corrosion but failed to stick to the metal test strips.

Summary Statement

My project attempts to stop or slow corrosion in a saltwater or marine environment.

Help Received

My dad taught me to use AC/DC transformer from train set, multimeter, Microsoft Excel tables and digital scale; My grandfather suggested pertrolium jelly as method to stop corrosion.