



CALIFORNIA STATE SCIENCE FAIR  
2011 PROJECT SUMMARY

<b>Name(s)</b> Kaylyn M. Hedstrom	<b>Project Number</b>  31966
<b>Project Title</b> Electrostatic Power from Water	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of my project was to determine how the natural electric charge present in ordinary water can be used to generate static electricity. <b>Methods/Materials</b> I constructed a Kelvin electrostatic generator to be used as my testing apparatus. I tested 4 different water flow rates multiple times to determine if dropping the water at any of these rates would produce static electricity. By dropping the water, the friction against air changes its electric charge. Inducing the electrical charges to separate-they then can be used to generate static electricity. <b>Results</b> The tests on 3 of the 4 flow rates produced static electricity, which was confirmed by the spark between the electrodes on the Kelvin electrostatic generator. The 4th and slowest flow rate didn't produce a visible spark. Checking with a digital multimeter confirmed the presence of a charge. Using the Kelvin electrostatic generator demonstrated and confirmed my hypothesis. <b>Conclusions/Discussion</b> By using the Kelvin electrostatic generator I was able to achieve my objective and confirmed my hypothesis. I have concluded that it is possible to generate static electricity from the natural electric charge in ordinary water.	
<b>Summary Statement</b> Altering and separating the natural electric charge present in ordinary water with the use of a Kelvin electrostatic generator to generate static electricity.	
<b>Help Received</b> Mother helped type. Father helped construct apparatus. Family assisted with testing.	