



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

<b>Name(s)</b> <b>Maxime J. Kawawa-Beaudan</b>	<b>Project Number</b> <b>S1014</b>								
<b>Project Title</b> <b>The Effect of Iron Sulfate Fertilization in Ocean Water on Phytoplankton Growth</b>									
<table border="1"><thead><tr><th><b>Objectives/Goals</b></th><th><b>Abstract</b></th></tr></thead><tbody><tr><td><b>Methods/Materials</b> Powdered iron sulfate from Alpha Chemicals</td><td></td></tr><tr><td><b>Results</b> This experiment showed that, following with the predictions, as the parts per million of iron sulfate increased, the biomass of phytoplankton increased accordingly.</td><td></td></tr><tr><td><b>Conclusions/Discussion</b> These results show that iron fertilization is indeed a promising technique for combating ocean acidification. Although this experimenter was unable to measure carbon dioxide levels, because of the expensive nature of carbon dioxide measuring systems, the large blooms of phytoplankton allow one to follow the logic that, because phytoplankton performs photosynthesis, absorbing carbon dioxide as a reactant, the sudden increase in phytoplankton would require a large intake of carbon dioxide.</td><td></td></tr></tbody></table>		<b>Objectives/Goals</b>	<b>Abstract</b>	<b>Methods/Materials</b> Powdered iron sulfate from Alpha Chemicals		<b>Results</b> This experiment showed that, following with the predictions, as the parts per million of iron sulfate increased, the biomass of phytoplankton increased accordingly.		<b>Conclusions/Discussion</b> These results show that iron fertilization is indeed a promising technique for combating ocean acidification. Although this experimenter was unable to measure carbon dioxide levels, because of the expensive nature of carbon dioxide measuring systems, the large blooms of phytoplankton allow one to follow the logic that, because phytoplankton performs photosynthesis, absorbing carbon dioxide as a reactant, the sudden increase in phytoplankton would require a large intake of carbon dioxide.	
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<b>Summary Statement</b> This experiment explores the effectiveness of a new method of fighting ocean acidification, and perhaps global warming: Iron fertilization.									
<b>Help Received</b> Parents purchased materials									