

Abstract

Are you interested in ways the people of the world can reduce the dependence of fossil fuels and oil? If you are, then keep on reading. Solar cells are an environmentally friendly way to produce electricity. I did this project because in today's world we are very dependent on fossil fuels and oil. This supply of oil and fossil fuels will one day run out. Therefore, I did this project to learn the ropes of solar energy. My hypothesis is that, if a solar cell is placed under different wattage light bulbs, then the most electric current will be produced by the highest wattage bulb. Four different wattage light bulbs (independent variable) were tested. They were placed above a small solar cell and then recording the amount of DC current (dependent variable) produced in the 200Ma range. The results of this experiment proved that my hypothesis was correct. The bulb with the higher wattage produced a stronger DC current. I thought it was interesting that if you moved the lamp away from the middle of the solar cell just one centimeter there would be a fairly large difference in the results. Now, there are scientists working on making the solar cells more efficient by following the sun's path. This allows more light energy to be gathered, thus more electricity produced.