DSSCs and Their Potential for Clean Energy

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With the increase of production and research of dye synthesized solar cells (DSSC), solar technology as a whole has advanced and could possibly cause solar technology to expand to all households due to cheaper production of solar cells. Lingering problems has appeared through the advancement of DSSC's, this problems are the lack of efficiency and inability to create steady productions of energy. Lack of efficiency causes a solar cells to produce less energy compared to its size, taking more space for small amounts of power, and the inability to produce steady amounts of energy causes problems of powering devices. I plan to create a DSSC to fix one of these problems. I will attempt to create DSSC with multiple uses such as charging a discharged rechargeable battery and/or be able to power a 3V LED light. This would be my second year to study DSSCs, After a project I completed last year to create a DSSC that had an efficiency rating of 19% which had failed. This has lead me to try to downgrade from an constant efficiency to the ability to power an object for a limited amount of time.

Awards Won: