

Data

	Dyed Solar Cell (Prepared fresh)			Dyed Solar Cell (After 1 week)
Light Source	None	Classroom Light	Overhead Projector	Overhead Projector
Voltage				
Current				

Post-lab Questions

1. Titanium oxide is the most common pigment in white paints. Using the normal, inexpensive source of this pigment in a DSC does not work however. What is the function of nanocrystalline TiO2 in a solar cell?

2. Predict how you would expect the voltage and the current produced by a DSC to change of the size of the solar cell were increased from 1 × 3 to 3 × 3.

3. What are the advantages and disadvantages of placing solar panels on the southern versus the western side, respectively, of a home?

4. Discuss how the design of solar panels, or small cells, from the components used in this experiment align with some the principles of green chemistry. Use the descriptions of the 12 principles of green chemistry found in the introduction section as a reference.

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