



Polarization of Light Experiment

1. Polarizing Filters

Examine the two polarizing filters (polarizers) by holding them up to room light with one polarizer in front of the other. Slowly rotate one polarizer while keeping the second stationary. Observe the relative intensity of the light.

2. Light Emitting Diodes, Diode Lasers, and Polarizers

Examine an LED through a polarizer. Slowly rotate the polarizer and observe the relative intensity of the light from the LED.

CAUTION: In the next experiment, which uses a diode laser, do not look directly at the laser beam. Also, watch where you are directing your laser so that it is not directed at someone else.

Shine the diode laser through a polarizer onto a wall. Slowly rotate the polarizer, and observe the relative intensity of the laser spot.

3. Water, Corn Syrup, and Polarizers

Place a large polarizer on the stage of an overhead projector that has been turned on. Take two identical beakers and fill one with water and one with corn syrup to the same height. Place a second large polarizer so that it covers the tops of the two beakers. Observe how much light is transmitted as the upper polarizer is rotated.

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This page created by S. Michael Condren Christian Brothers University. Last modified July 12, 2006