Set source at 0, and adjust for approximately parallel light. Set hole (2" diameter) as close to source as possible, two-polaroid mount at approximately 40, and lens (f = + 17 cm) at approximately 57. Place optical bench table in aisle directly in front of lecture table, to project image on screen.

Place specimen (say the rose) in central post of two-polaroid mount and, using no polaroids, adjust lens to focus image of specimen on screen. Note that the specimen is not colored.

Remove the specimen and insert two polaroids, adjusting them to the crossed position. Now reinsert the specimen and note the colors. Rotate the second polaroid and note the color changes. Repeat for the two other specimens (butterflies).

Replace the specimen with a piece of crumpled cellophane, and note the colors. (If the cellophane is obtained from a student who smokes, the students are convinced that there is nothing unusual about the sample.)

Note: The indices on the polaroids correspond to transmission of the electric vector.