# Spectrometry Applied

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This study will show how much make-shift spectrophotometers can be relied upon. By taking pictures of specific fluids as water and colored water, we can measure these with a software based program on a computer. Analyzing these images can determine if the outcome results in accurate measurements. By comparing the colored water to the parent fluid—water, can help to see the differences in UV speculation. An important tool for this to be possible is a cell phone with a functioning camera—that is need for the pictures taken. The software program can be downloaded from the Scheeline website as it is free. Assembling the spectrophotometer is just the gist of the project, afterwards comes the measurements to see if the make-shift device really does capture at accurate measures. Putting the reference sample, which is water on the right side; while you put the fluid (i.e. color) on the left side. The data collected from the measurements will come in graphs that can be tweaked to make the spiking larger or smaller. The information showing the results will appear on the lower right side of the window.

**Awards Won:**