

APPENDIX II

PROCEDURE FOR THE EXPERIMENT WITH HEXANE

This experiment is conducted by using the plano-convex lenses with 15cm focal length. The laser source and light intensity power meter are turned on and the average voltage reading recorded for the first 60 seconds should be around 1.2V. Next, a transparent empty container with the dimension of $7\text{cm} \times 10\text{cm} \times 7\text{cm}$ is placed in the measurement area (between the lens holders) and the average voltage reading is taken for another 60 seconds.

Then, 450ml of Hexane solution is poured into the container and the average reading for 60 seconds is taken. The average voltage reading of Hexane-filled container (V_i) is supposed to be higher than reading of the empty container (V_o). Finally, the absorbance (A) and molar absorptivity (ϵ) of Hexane solution are calculated by using the average voltage values of empty container and Hexane-filled container.