

Optical Interfacing of PMT

Elizabeth Chen

2017-06-07

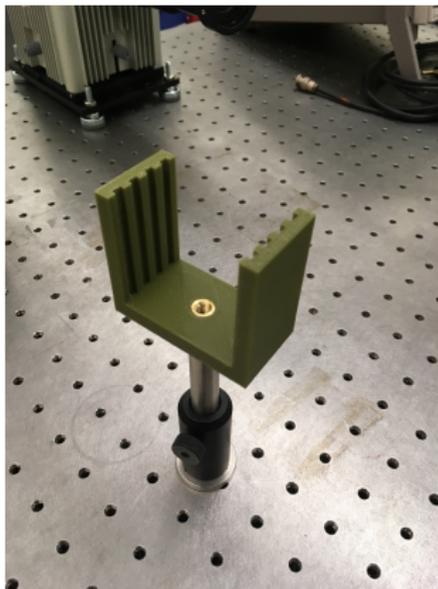
Table of Contents

1. Progress Update

2. Next Steps

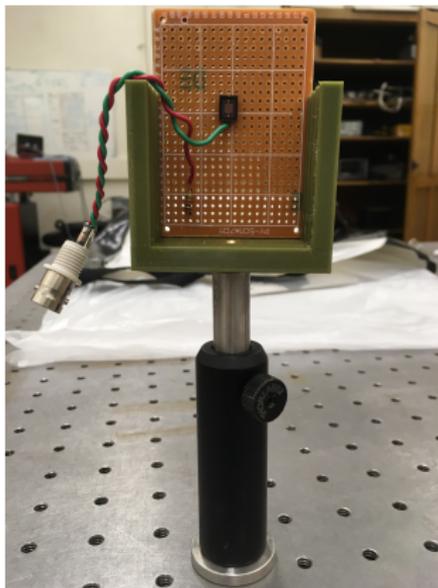
Progress Update

Photodiode Mount



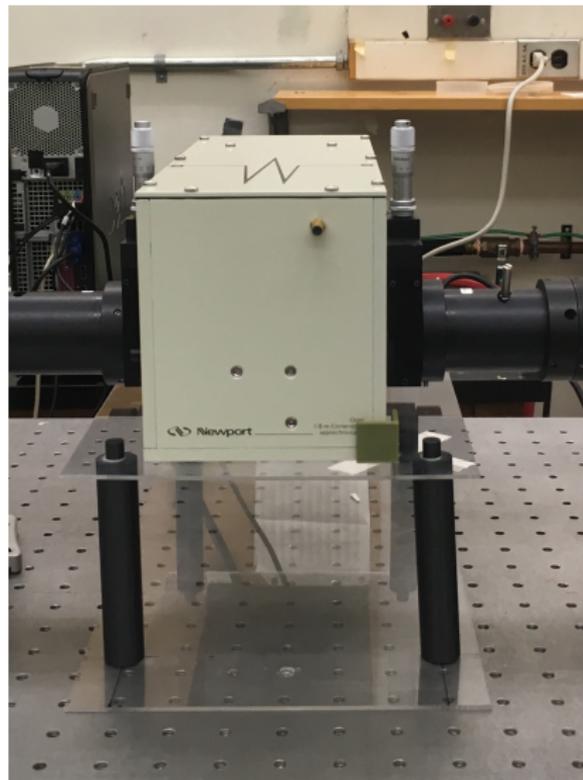
- Photodiode along with its circuit soldered onto 3 printed circuit boards stucked together
- Circuit board secured on plate holder
- Plate holder mounted on support column

Photodiode Mount

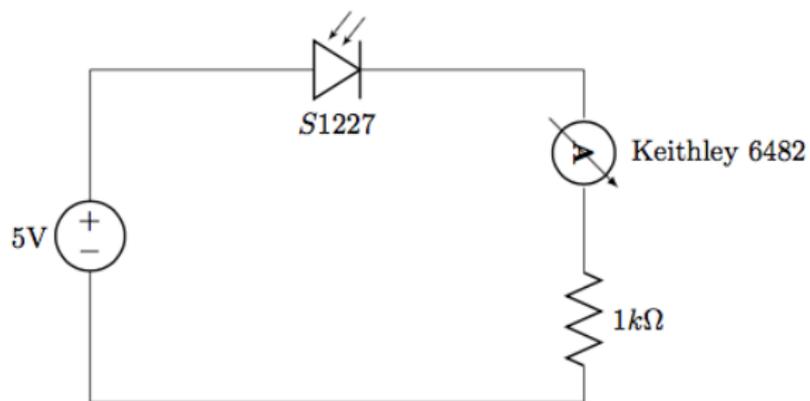


Monochromator Mount

- Top and bottom platforms made of acrylic sheets
- PLA plastic support columns
- Can be secured onto breadboard table
- Can be taken apart



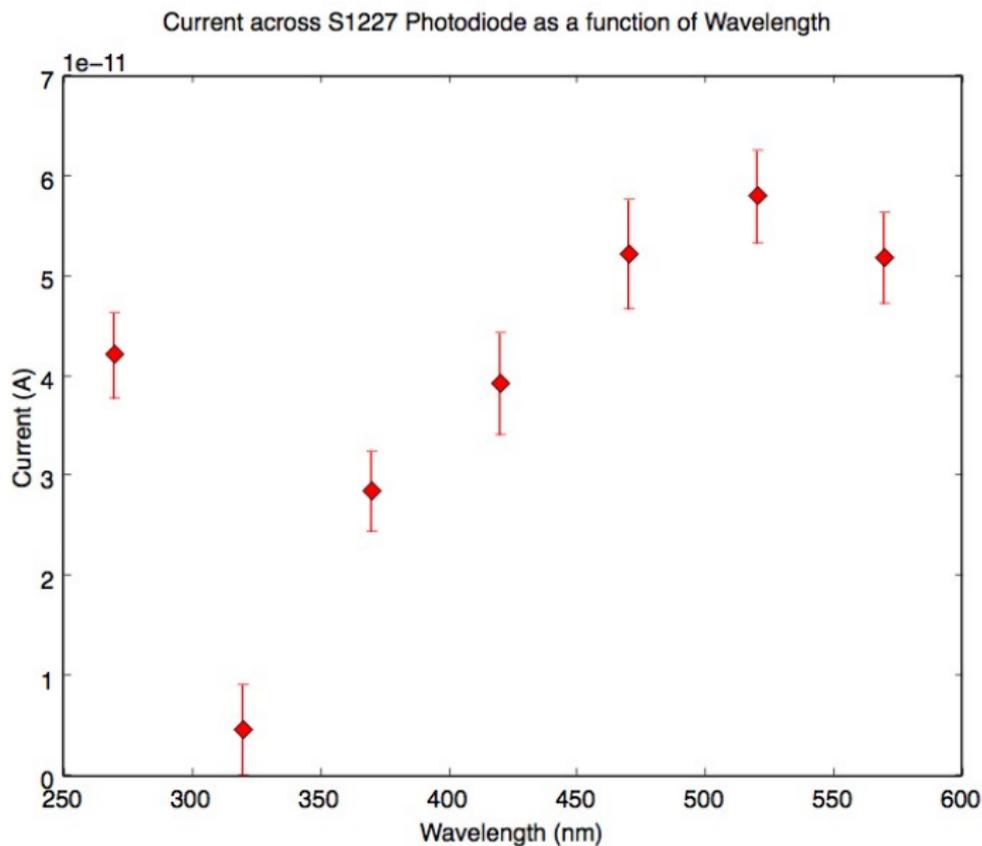
Photodiode Circuit



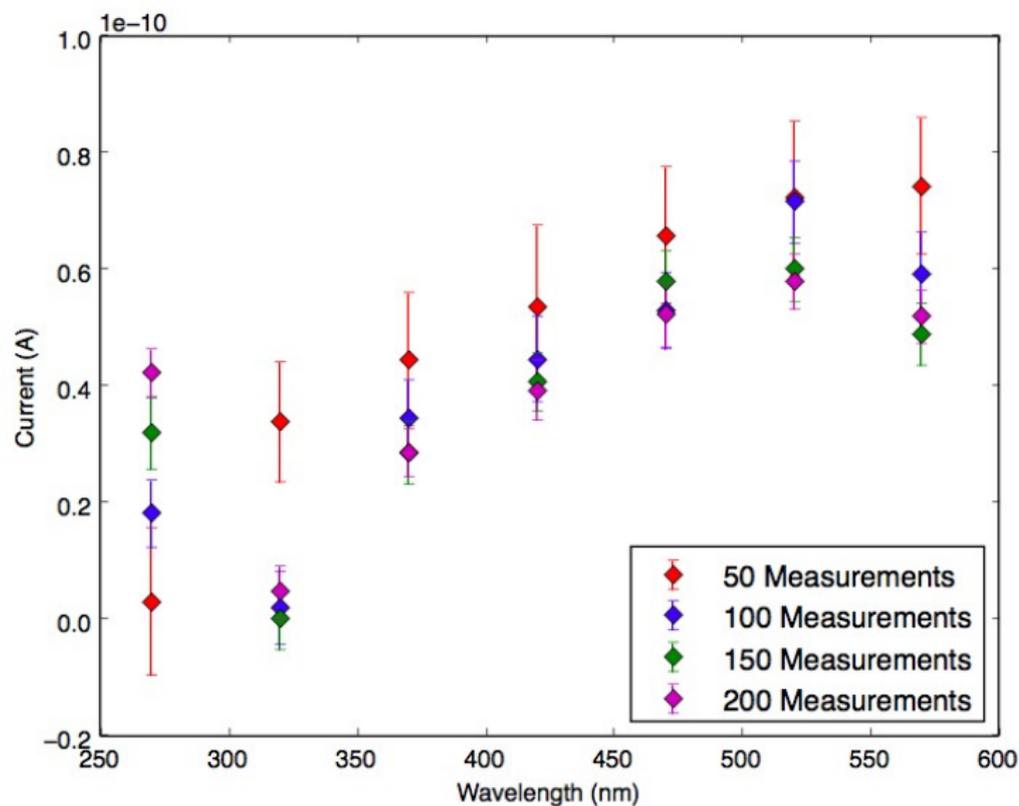
Collimating Light Beam

- I didn't really collimate the light beam
- Focused the light beam so it hits photodiode receptor screen entirely

Experiment 0: Current as a Function of Wavelength



Experiment 0: Current as a Function of Wavelength



Next Steps

Plans for upcoming weeks

- Configure beam splitter set-up
- Build another plate holder
- Repeat experiment 0 for more wavelengths