

10/11/2017

Tasklist:

- Attend Seminar
- Attend Group meeting
- Prepare Au/Zn core-shell NP
- Freeze dry AuNP
 - Note: This was not performed because the chemistry department was out of liquid nitrogen.
- Take UV/Vis for the Samples

➤ Prepare Au/Zn core-shell NP

-Step 1: Using the prepared stock solutions, the following samples were prepared.

Sample 1

1mL AuNP (His/NaOH) + 1mL His + 1mL NH₄OH + 1mL ZnAc₂ + 6mL H₂O

Sample 2

1mL AuNP (His/NH₄OH) + 1mL His + 1mL NaOH + 1mL ZnAc₂ + 6mL H₂O

-Step 2: Place these two samples into the oven at 80 degrees C for 6 days.

-Step 3: After the heating is complete, the UV/Vis was taken for these two samples. The graphs are shown in figure 1.

Figure 1: UV/Vis for Histidine Samples

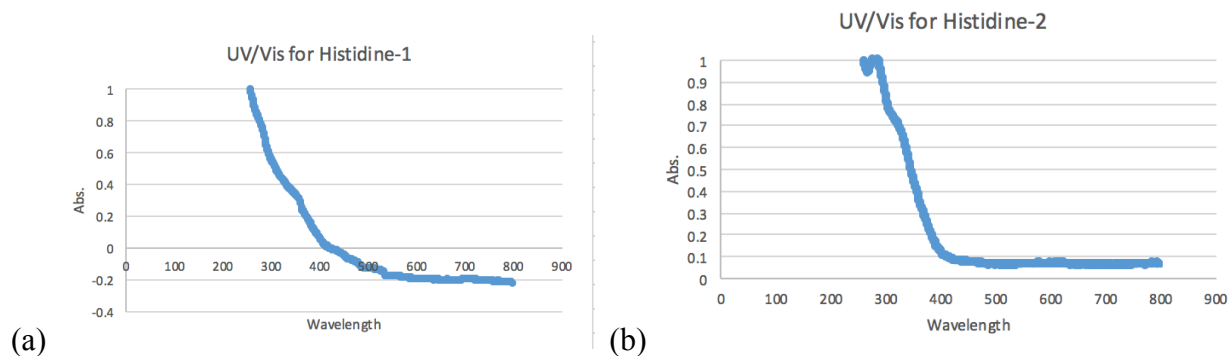


Figure 1 shows the UV/Vis for the two samples prepared on this day. (a) shows the UV/Vis for the first sample. There are no apparent peaks in this graph; however, the absorbance did dip below 0 thus indicating error. (b) shows the UV/Vis for the second sample. There are no apparent peaks in this graph either.