Entry #9: U of A lab

Tested 7 Alloys

10/8/25

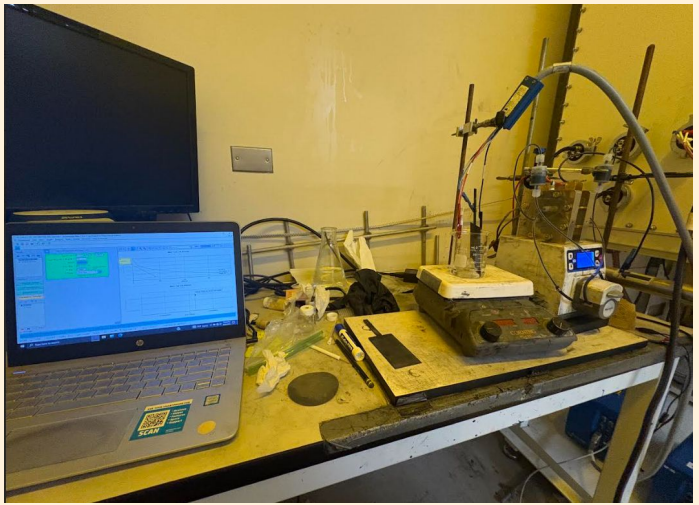
Bobby went to the U of A at 9 am. Was there until 9 pm.

Alloys 1,2,3,4,5,6,8 were tested for corrosion in artificial sweat solution in a 3 electrode experiment. MMO electrode was the counter, Ag-NO3 pseudo reference, and alloy as electrode.

50 ml of sweat solution placed into a 500ml beaker.

- Composed of 5g/liter NaCl, 1g/liter Urea, 1g/liter lactic acid.

Results showed different reaction mechanisms due to varying circuit fits.



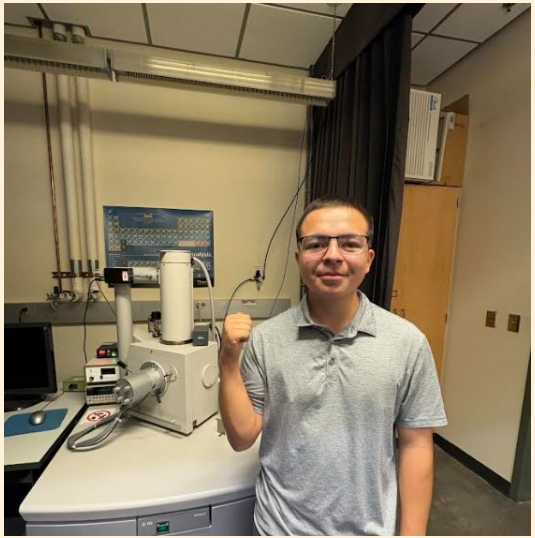
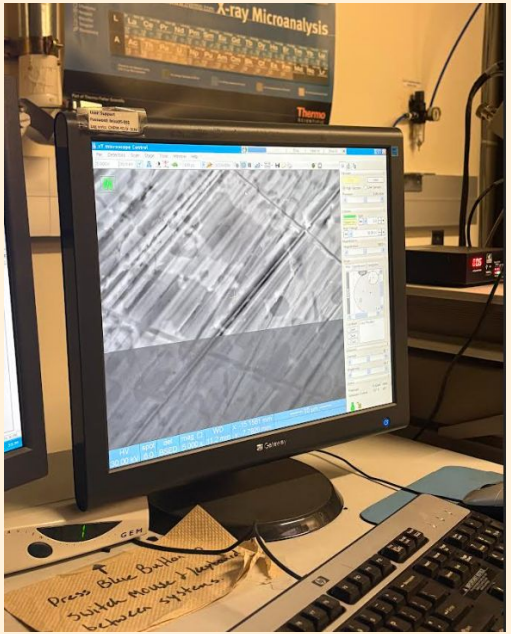
Electrochemical setup

Entry #15: U of A lab (SEM & EDS)

> **Bobby and Karina went to the U of A lab and was able to analyse alloys with the SEM and EDS**

10/22/25

- At the U of A lab from 10 am to 5pm
- Worked on electrochemical portion of research at the chemistry building lab
- Met with STAR Lab mentor at 2:30 at chemical sciences building to use SEM and EDS
- Analysed 6 samples of alloys with the scanning electron microscope and energy dispersion spectroscopy



Alloy 8 EBSD scan in progress