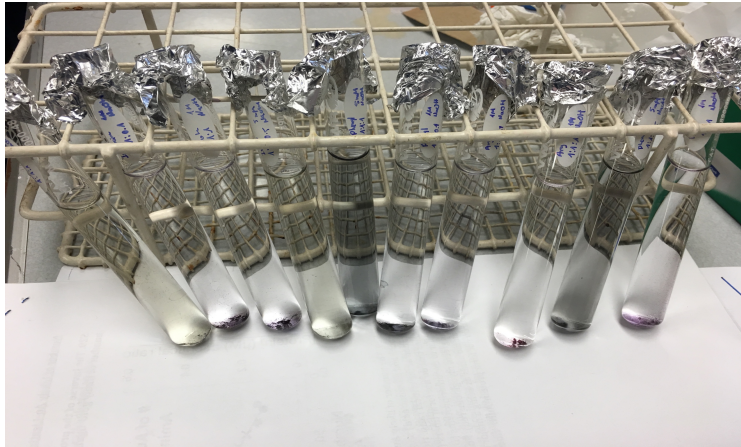


09_06 Notebook

Au:Amino Acid: NaOH solutions from 09_05



Pink solutions: Arginine (1:1:1), Phenylalanine (1:1:1), Isoleucine (1:1:1) all using 1M NaOH

Titrant Standardization cont.

-0.001 g KHPht in 30mL H₂O

-(200*10⁻⁶)*(0.25L)/(5*10⁻³)= **0.01L of 5mM NaOH**

-Table 1: Shows Calculated KHPht concentration based on titration using NaOH

	mL NaOH added	
Trial 1	29	
Trial 2	25.7	
Average	27.35	
M1V1=M2V2		
M1= KHPht concentration		
V1= 0.03L water added to KHPht solid		0.03
M2= 200uM NaOH	2.00E-04	
V2= 0.02735L needed for titration		0.02735
To solve for KHPht concentration		
M1= (M2V2)/(V1)		
M1	0.00018233	M KHPht

Amino Acid Titration

-Table 2: Shows measured pH values for Phenylalanine and Isoleucine as NaOH was added

NaOH added	Phenylalanine	Isoleucine
	pH	
0	4.92	6.62
4	4.92	6.84
8	5.1	6.9
12	5.33	7.5
16	5.56	8.24
20	5.63	9
24	5.87	9.5
28	6.06	9.75
32	6.31	9.85
36	6.76	9.92
40	7.26	
44	7.34	
48	8.14	
52	8.6	
56	9.09	
60	9.51	
64	9.72	
68	9.83	
72	9.89	
76		
80		
84		

-Figure 1: Corresponding graph to Table 2

