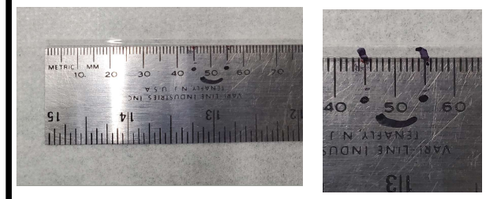
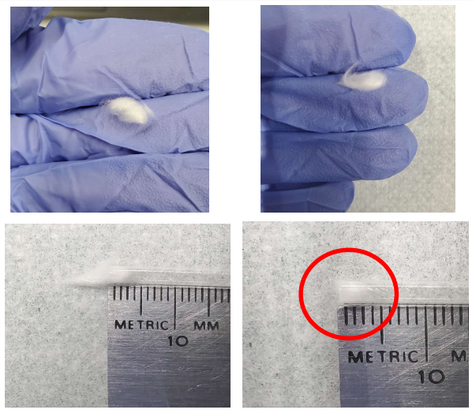
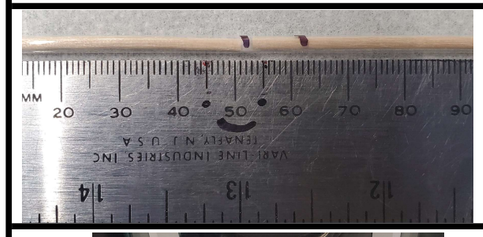
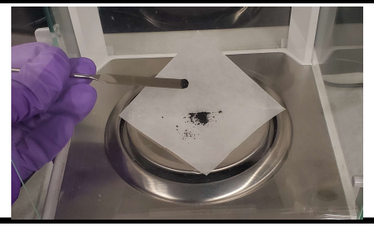
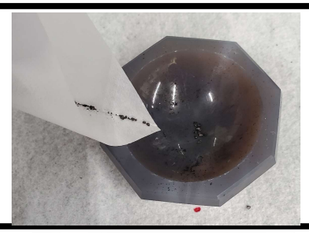
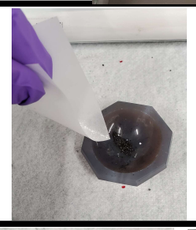
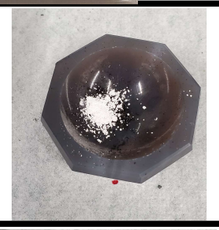
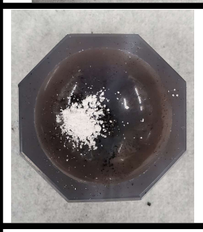
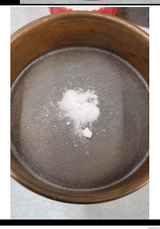
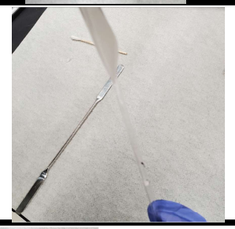
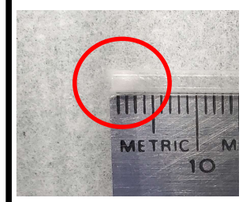
Standard Work Instructions for Loading 3-mm Capillary

Step	Description	Diluted Sample	Pure Sample	"Sticky" sample	Trouble shooting
	1. Determine which capillary material to be used. Kapton max operating temperature is 300 ºC. Cell using quartz tube has a max operating temperature of 700 ºC.				
	2a. Place capillary at edge of **ruler**. 2b. Use **ruler** to mark the 45 and 55 mm limits of the reactor bed with a **sharpie**.				
	3a. Take quartz wool and form a "pea" size sphere. 3b. Roll "pea" into a cylinder the same diameter as capillary. 3c. Insert quartz wool into capillary about 3-4 mm deep. Remove excess quartz wool with finger.				
	4a. Use 1st **Q-tip** to force quartz wool to 45 mm mark. 4b. Use 2nd **Q-tip** to compress quartz wool. 4c. Record mass of capillary and set aside.				
	5a. Place **weigh paper** on **scale** and use **spatula** to weigh the amount of sample needed. 5b. Record mass.				
	6. Pour sample onto **mortar**.				
	7a. Place **weigh paper** on **scale** and weigh the amount of diluent needed. 7b.Record mass.				
 	8. Pour diluent into **mortar.**				
 	9. Use **pestle** to mix and grind powder on **mortar** until well mixed or crushed.If your pure sample is a fine powder this step can be skipped.				
	10a. Place weigh paper on scale and weigh the amount of powder needed for pellet press. 10b. Excess powder should be placed in labeled vial or in waste bag.				
	11. Assemble molecular **sieve** (larger particle seive should always be on top). Consult Co-ACCESS for recommended seive configuration.				

Standard Work Instructions for Loading 3-mm Capillary

Step	Description	Diluted Sample	Pure Sample	"Sticky" sample	Trouble shooting	Step	Description	Diluted Sample	Pure Sample	"Sticky" sample	Trouble shooting
 	12a. Pour sample onto **sieve**. Use pestle to gently press sample through mesh. 12b. Shake **sieve** back and forth for sample to pass through mesh as well.										
 	13a. Recover sample from middle **sieve** and pour on folded **weigh paper**. 13b. With **weigh paper**, pour into capillary tube that was made in previos steps.										
	14. If the capillary bed is less than 10 mm, and the only sample remaining is in the bottom sieve (No more pure sample in vial), use the excess sample in bottom sieve and follow Capillary section of "Standard										
 	15a. Repeat step 3 to form quartz wool. Use **Q-tip** to force quartz wool to 55 mm mark to make seal. Do NOT compress bed. 15b. Record mass.										
	16. Follow "Standard Work Instructions for Assembling 3-mm Capillary Cell."										