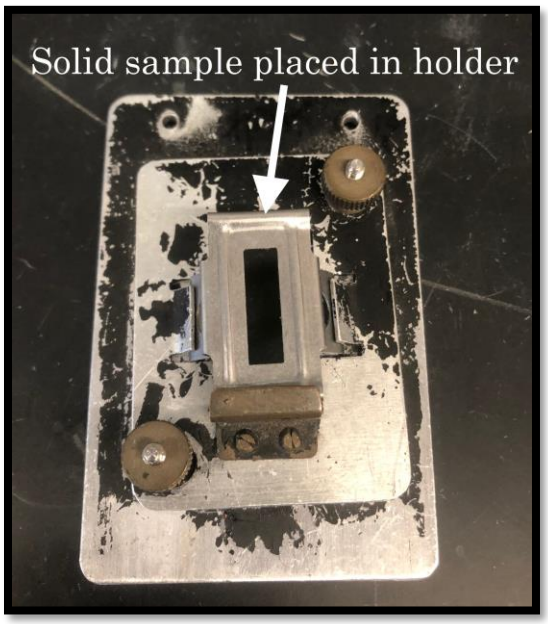
TRANSMISSION MODE FTIR
Sample Preparations Procedures

1. **No Cell**
    a. **Solid Samples**
        i. **Transparent/Opaque Solids**

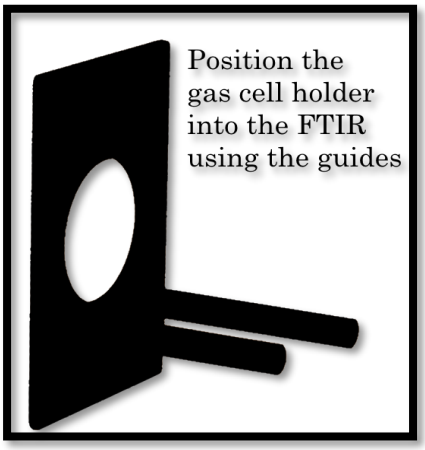


        ii. **Thin Film**

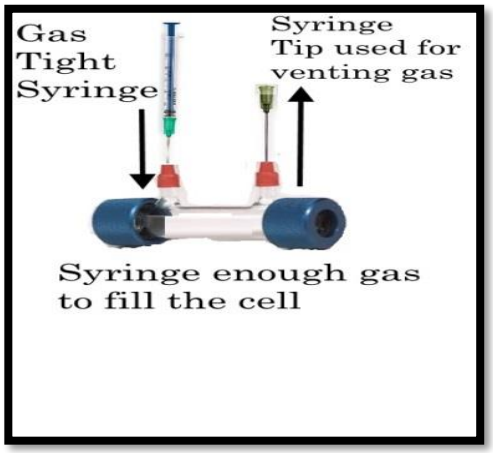
2. **Cell**

   a. **Gas Cell**

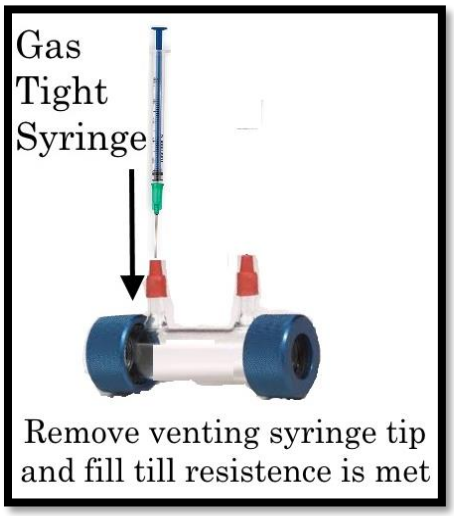
      i. **Preparation of a Gas Cell (select the appropriate cell windows required)**



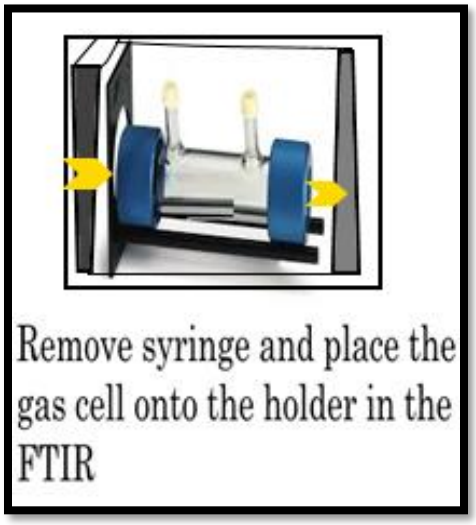
1.



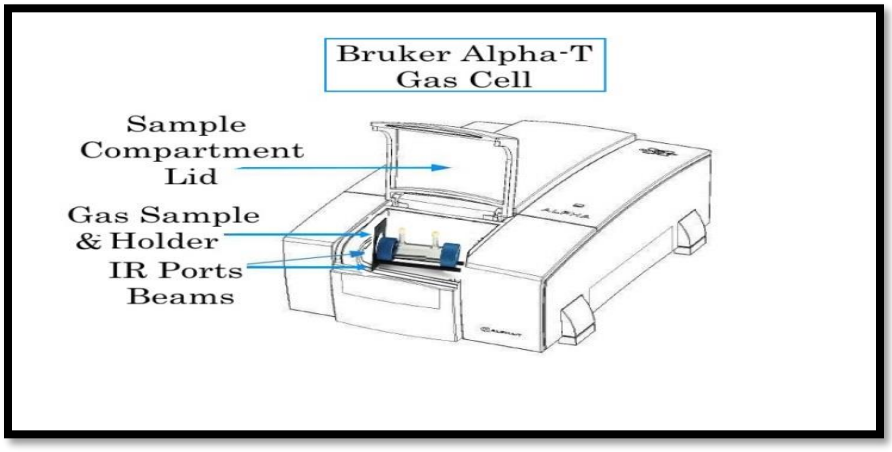
2.



3.



4.



5.

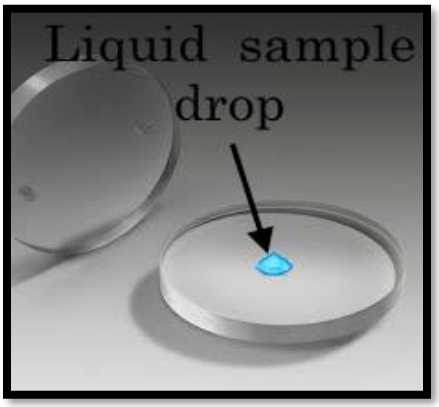
6. **Clean the gas cell by removing the septa, and letting the cell vent by N_2 purge.**

b. **Liquid Samples**

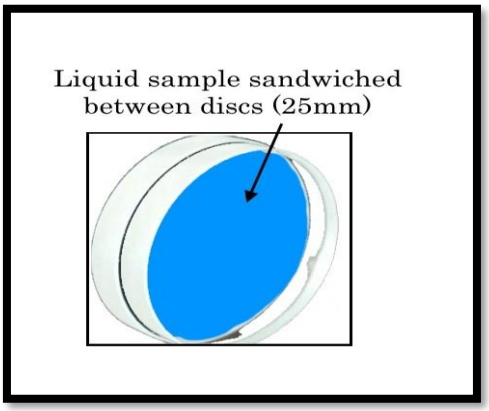
i. **Preparation of a Liquid Cell (select appropriate cell windows required)**

1. **25mm Salt Cells (NaCl, KBr,CsBr)**

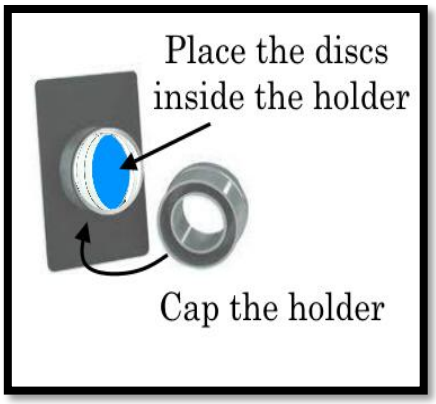
a.



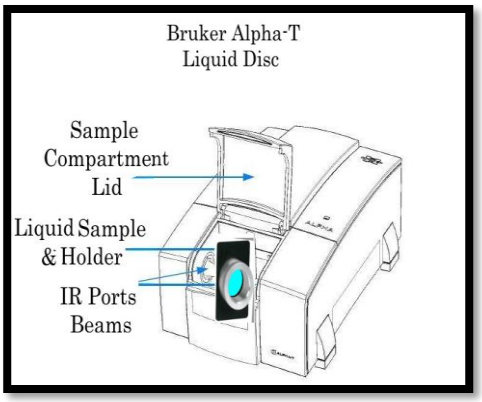
b.



c.



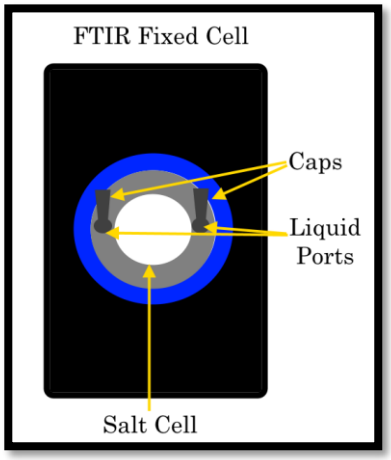
d.



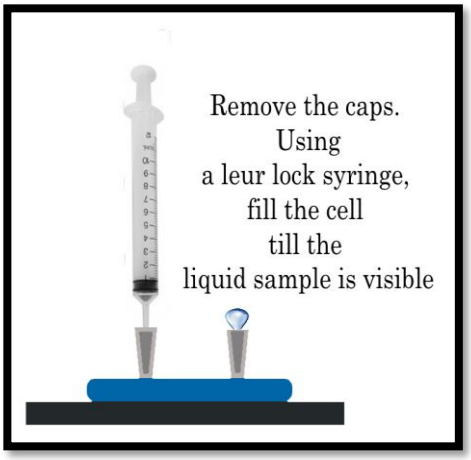
e. **Clean the cell by removing it from the holder and cleaning with $CHCl_3$.**

2. 25mm <u>Fixed</u> Salt Cells (NaCl, KBr,CsBr)

a.

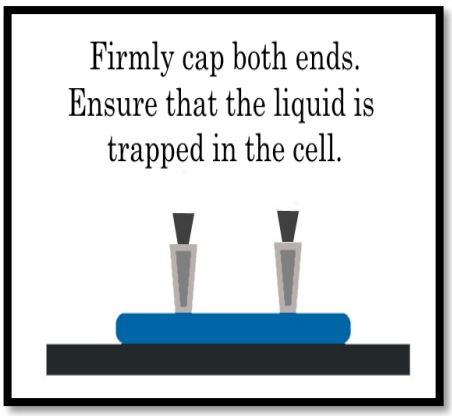


b.

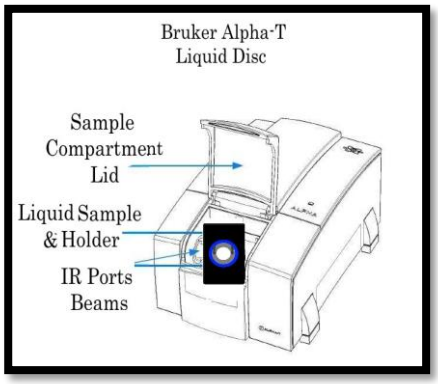


c.

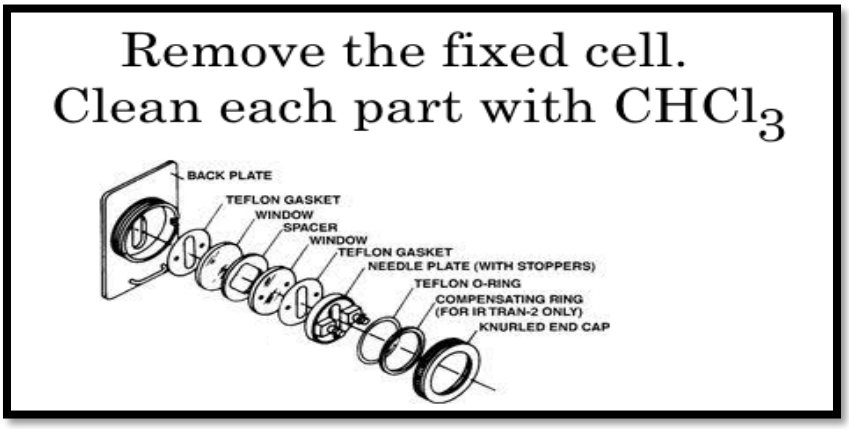
d.



e.

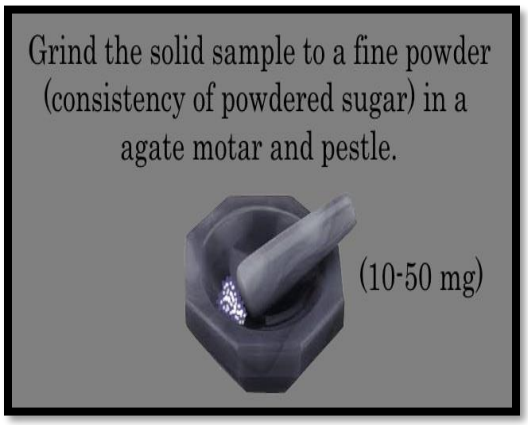


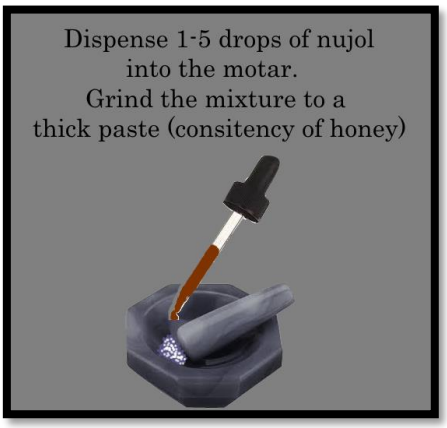
f.

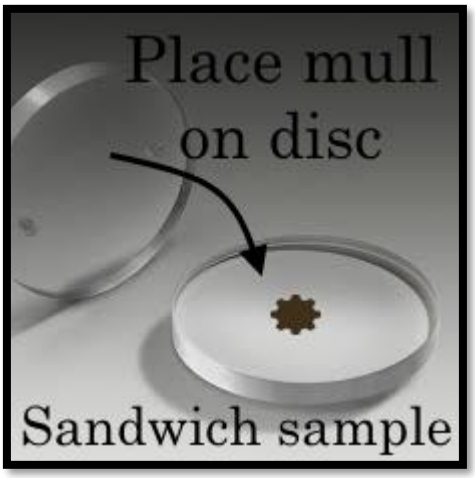


c. Solid Samples

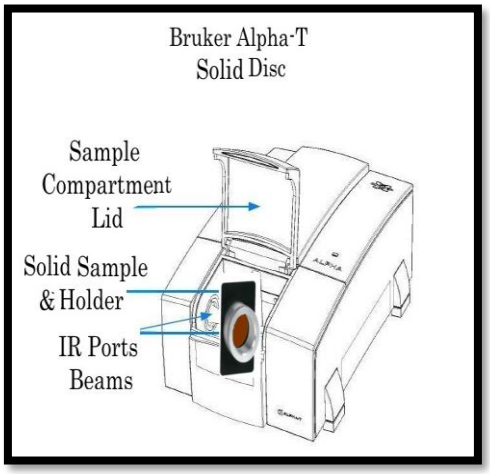
i. Nujol Mull

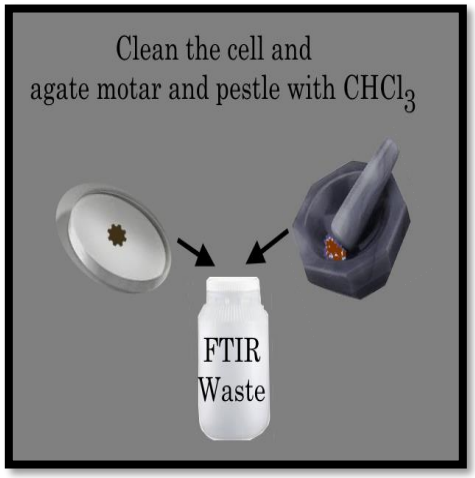
1. 

2. 

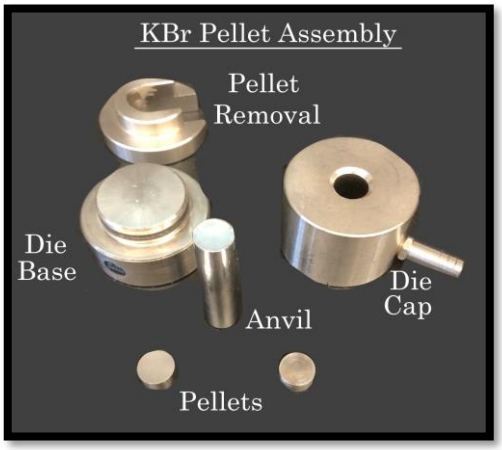
3. 

4. 

5. 

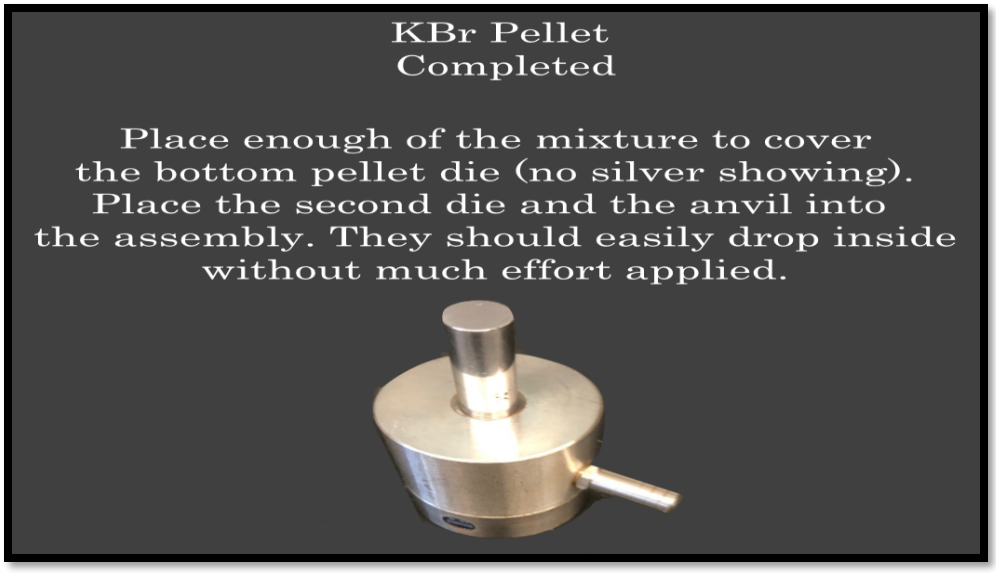
6. 

ii. KBr Pellet

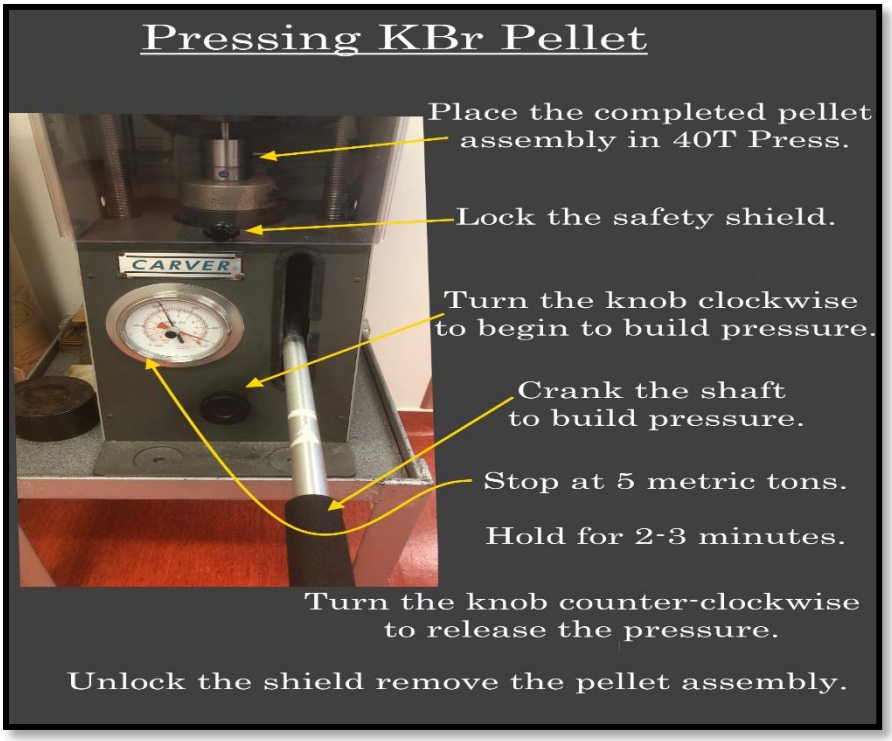
1. 

2. 

3. 

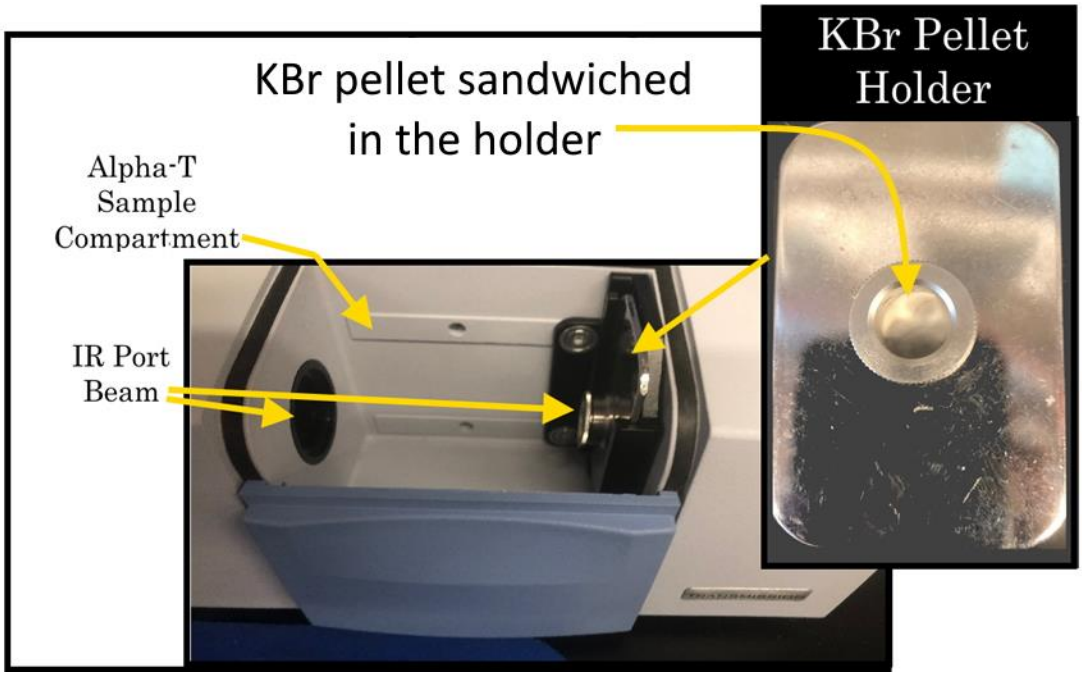
4. 

5.


Pressing KBr Pellet
Place the completed pellet assembly in 40T Press.
Lock the safety shield.
Turn the knob clockwise to begin to build pressure.
Crank the shaft to build pressure.
Stop at 5 metric tons.
Hold for 2-3 minutes.
Turn the knob counter-clockwise to release the pressure.
Unlock the shield remove the pellet assembly.
CARVER

6.


KBr Pellet Removal from the assembly
Turn the pellet assembly upside down on a table, holding the anvil.
Remove the base.
Push the anvil through the die assembly till the KBr pellet is visible.
In some cases, the pellet removal may be requied when the anvil or die will not move with force of hand.

7. 

8. 

Contact the TRACES Manager for further details.