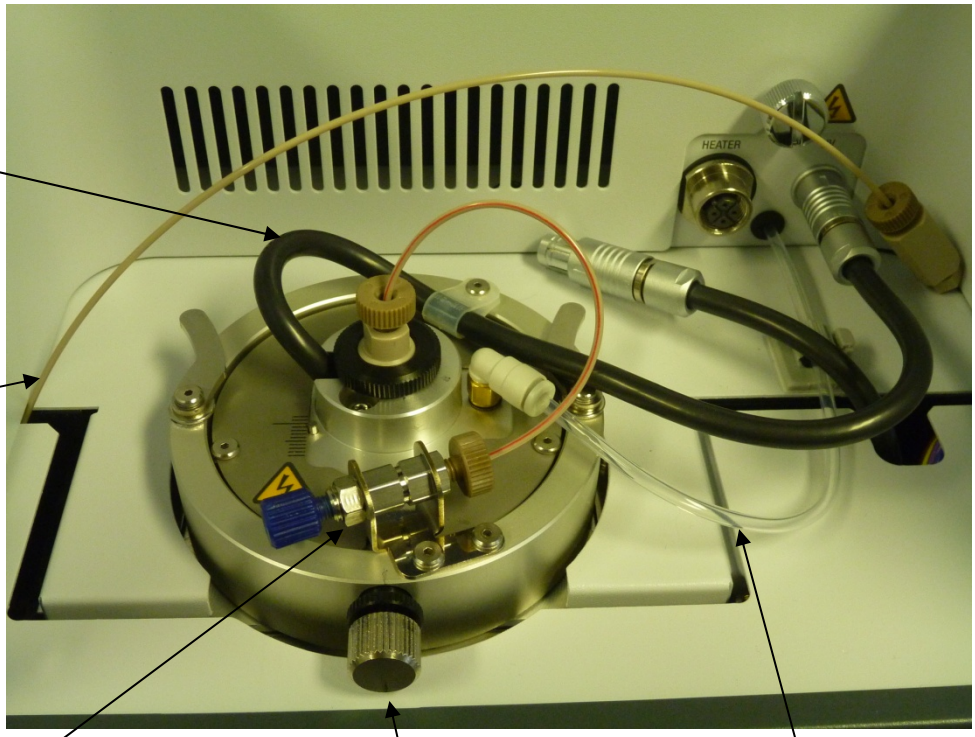
Setting up a batch sequence and helpful diagrams of ESI probe

- APCI (atmospheric pressure chemical ionisation) probe used for non polar compounds
- ESI probe used for polar compounds. ESI probe is pictured below and is useful for most applications



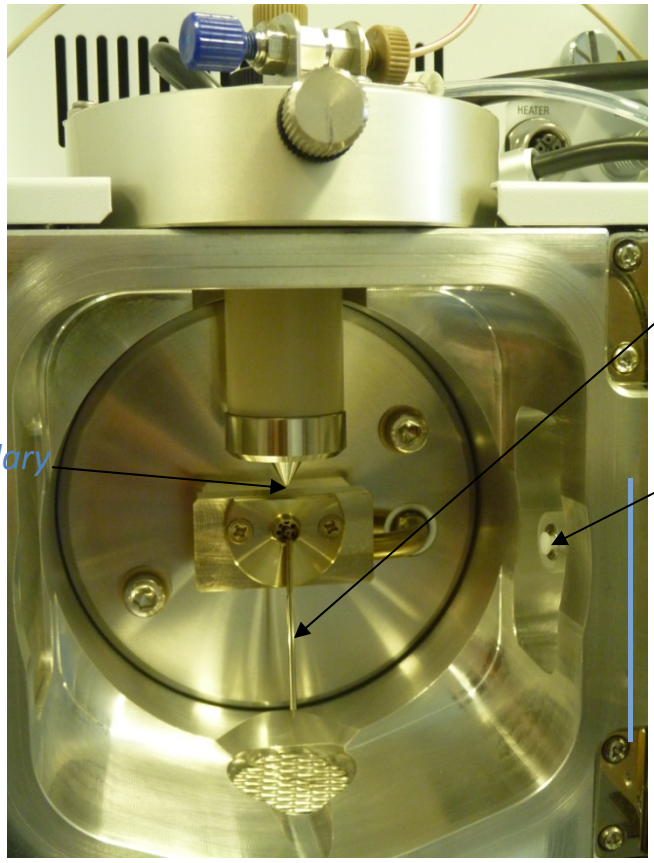
To HV voltage

Line from LC. Ensure it it is going to waste when not in use.

MS inlet from LC. Remove the screw on cap and screw in the line from LC. ***Ensure column is clean before doing this.***

Nebuliser gas (N_2)

Locking knob. DO NOT adjust



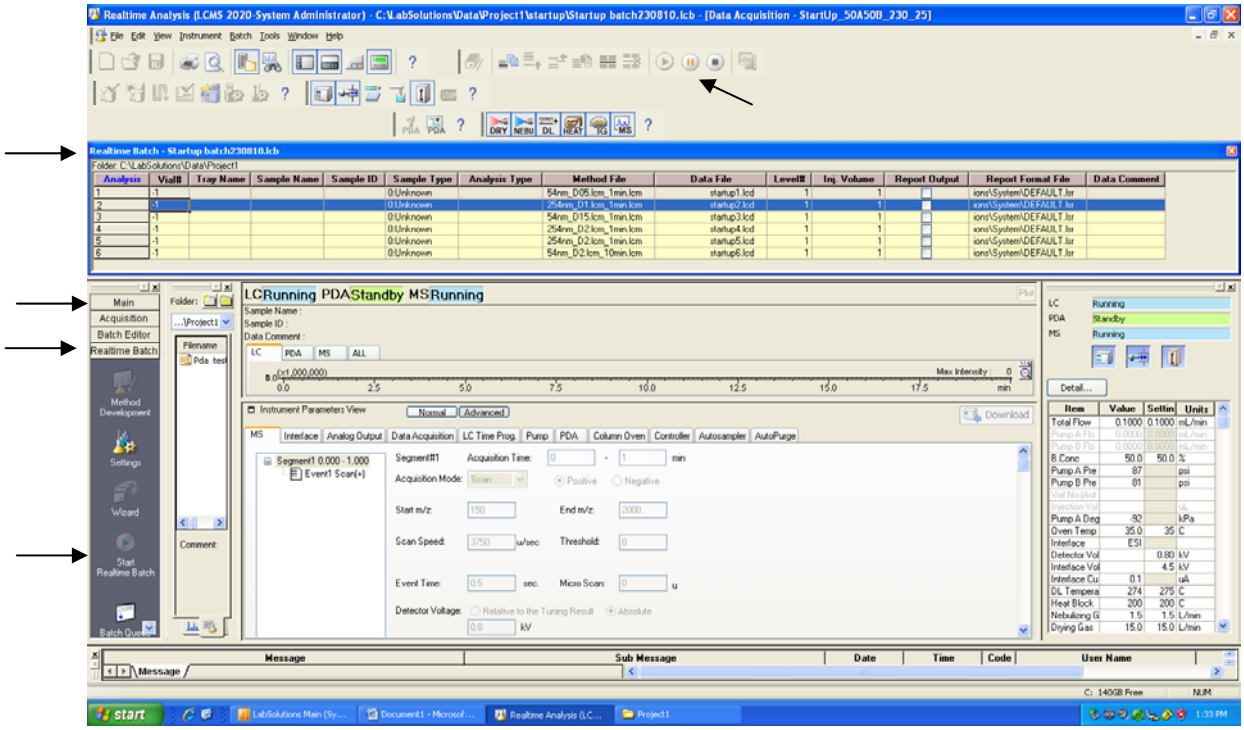
Remove the thin plug when nebuliser gas on. Keep in when not in use

capillary

White plug removed for corona needle insert (APCI 0nly).

Keep white plug in for ESI or when MS not in use

- Data can be collected in SIM or SCAN mode (see method development section) using ESI or APCI probes. However sample injection should be approx 500 times less concentrated when collecting in SIM.
- flow rates of 0.2 -0.5 mL/min ideal for ESI



To queue experiments in a batch:

1. Click on **main** icon
2. If you started up the machine, ensure that you load *startup batch020910.lcb* file. 6 sequential startup rows should be automatically loaded. Check that:
    a. vial# is set to -1 (i.e. no sample for injection)
    b. tray name is set to 1
    c. sample name
    d. method files are in sequential order as shown in diagram
    e. data files are selected as shown
3. click **realtime batch**
4. highlight first row and click **start realtime batch**
5. select **all rows**, click OK
6. After startup batch has run to completion, close the startup batch file.
7. To create a new batch sequence: in file menu, click new batch file. A new batch sequence window is opened. *Alternatively you can create a new batch sequence through the wizard*.
8. In each row (run) set:
    a. Vial# corresponding to location of your sample vial. When placing vials in rack ensure rack clicks back into place.
    b. Tray name to 1
    c. Sample name

    d. Select a saved method file (if no suitable method file exists, see section XXX-creating new method files (FARGOL)) by clicking on arrow in RHS of cell.
    e. Select data file
    f. Select injection volume
9. Repeat for other rows.
10. Start realtime batch
11. Save the batch sequence (e.g give it today's date). The batch sequence is thus set up for the day.
12. Go back and highlight the first row and click **start realtime batch**
13. If additional rows need to be added to the day's batch sequence after starting the realtime batch, click the **pause** icon in top of realtime analysis window. Right click in the row immediately before the shutdown run, and select **add row** from drop down menu. Add details to the new row (see step 5). Repeat for additional samples, and then click **pause** icon again (to unpause) to continue the batch run. Your samples have now been placed in the queue.
14. If you are the last user for the day, add shutdown file to end of batch queue.