Mass Spectrometry Research Facility Sample Submission Services Protocol

(Updated 07/10/20)

Sample submission services protocol for 'Accurate Mass' and 'Alternative Ionisation' services. **Please note, paper submissions will not be accepted.**

For general guidance all interactions with MS staff relating to sample submissions should take place by email, Teams chat or video call. Please make contact by emailing an individual member of MS staff or msstaff@maillist.chem.ox.ac.uk. Entry into the basement MS lab is prohibited unless you have time booked on a trained-user instrument at that time and/or have booked one of the 2 available room booking slots. Using the MS basement lab as a thoroughfare is also not allowed.

The MS sample submission services are now operating under a revised submission procedure in order to reduce staff contact with samples and submission forms. Samples will be collected and placed on the service instruments periodically through the week. Please follow the **NEW** guidance below to submit samples:

1. Go to the 1st Floor MS Room between **7am and 2.30pm**; only enter if the room is vacant (only 1 person at a time is able to use the room).
2. On the right-hand side behind the door you will find the submission PC. Login your samples in the usual way recording their MSS or ESI numbers.
3. Label your samples with the correct service submission number and place them in the sample submission fridge located next to the PC.
4. You can now leave the sample submission room making sure you have a record of your MSS or ESI numbers to complete the sample submission form.
5. From a networked PC go to the MS-SRF website: https://massspec.chem.ox.ac.uk
6. Click on the 'Services' tab and download a copy of the 'small molecule sample submission form: https://massspec.chem.ox.ac.uk/files/smallmoleculessamplesubmissionformpdf Note that this is:
    i. A new form as of 2nd June 2020 (older version will not be accepted)
    ii. It is an editable PDF form which needs to be download from the server and opened in a pdf viewer.
7. Complete the form ensuring the 'Electrospray Accurate Mass Analysis' or 'Alternative Ionisation' box is ticked and the correct sample ID number is added.
8. Once the form is complete save it with the following naming format: SampleNumber_Name_Group eg. for an ESI service sample: ESI 98765_JohnSmith_CJS. It should be submitted electronically by placing it in the new 'Service Sample Submission' folder on the Q-drive here: \\chem.ox.ac.uk\srf\Mass_Spectrometry\Service Sample Submission.
9. These files may be removed from this folder for processing by the MS staff. Please note from 2.30pm-10pm the room will be used for access to trained-user mass spectrometer systems, via the instrument booking system, and will be limited to one person using the room at a time. **Do not drop off samples during outside of 7am-2.30pm**. Results from submission services will be delivered by email, however, it may take longer than usual for results to be returned. Until further notice the 24-hour guidance for sample turnaround times is suspended.

Sample preparation

1. Dissolve the sample in an organic solvent (eg DCM, $CHCL_3$, EtOAc, MeCN, MeOH) or H_2O at 1mg/mL.
2. Dilute 50 to 100 times with MeOH (if necessary use 50:50 MeOH/MeCN (low polarity) or water (high polarity).
3. Placed the solution in a 2mL sample vial with a screw cap lid (available from stores).

We thank you for your cooperation, best wishes, MS Staff