# CHEMISTRY RESEARCH LABORATORY

**Carousel #:**

**Instr**:

**Hours**:



# NMR SERVICE

|  |  |  |
| --- | --- | --- |
| **Name**:  | **Status**: Pt II D.Phil. Post Doc | **CRL Lab**:  |
| **Email**:  | **Phone**:  |
| **Group**:  | **[Pt II’s only]** Lab. **Supervisor's Name:**1  |  |
| **Submission Number**:2  | **Project Code/ Charge Account:** 3  | **Submission Date**:  |

**Nuclei of interest**: **Sample @:**4 Rack Fridge Request

**Solution Depths**:9

 Max 4.5 cm

 Min 4.0 cm

**Structure**: **Toxicity**: 5

**Experiments required (list ALL)**:

**Nature of problem**:6

**Mass supplied**:7 **Solvent**:8

Referencing: 1H and 13C spectra are referenced externally to TMS in CDCl3. 19F spectra and 31P spectra are referenced externally to CFCl3 in CDCl3 and to phosphoric acid in D2O respectively. Indicate if you have added an internal reference.

1) Part II students must provide the name of their **laboratory supervisor**.

2) You should quote the number generated on the sample submission system page.

3) This is what you would use for iProcurement purchases. Seek advice from the Finance team if you do not know this.

4) Indicate where your sample can be found. If ‘request’, you will be contacted by the NMR staff in due course.

5) Give ANY details you may know that relate to possible hazards associated with handling of the sample (such as in the case of sample spillage or tube breakages). E.g. toxic, carcinogen etc. If this is uncertain, enter UNKNOWN.

6) Indicate the expected presence of unusual shifts. Describe briefly any particular problem you wish to address (this will help us choose the most appropriate experiment(s) for the problem). **All experiments requested must be listed on this form**.

7) 1H: 1-10 mg for the 600; 13C: 10+ mg for the 600 (ca. 50+ mg should be run on the 400s); 19F: 1-10mg; 31P: 10 mg. Please ask for others.

8) For routine analysis, all samples should be supplied in 5 mm high-quality tubes (Norell 400S, Wilmad 507-PP, or New Era MP5 at least). Cracked, scratched or broken tubes will not be accepted.

9) The maximum solvent depth for 5 mm tubes should be 4.5 cm (600l), the minimum is 4.0 cm (500l). Note that the automated spectrometers also require a sample depth of 4.0 - 4.5 cm. Samples with depths outside this range may be rejected.