Running on the AV400

Preparing your sample

• Use a deuterated solvent (needed for lock)

• Use at least 800 μl (for good shimming/linewidths)

• Use tubes rated for 400 MHz (for good shimming/linewidths)

• (For $^{13}$C and other lower-sensitivity nuclei) Use appropriate concentration of material (for $^{13}$C: ~30 mM for SNR of 10 at 32 scans, ~10 mM for SNR of 10 at 512 scans)
Running on the AV400

Submitting your sample

1) Put tube in spinner

2) Clean tube and spinner with kimwipe

3) Position tube with depth gauge—make sure spinner is flush with top

4) Small sample volumes should be centered in coil by brining tube back up a bit
5) Identify the next available position in the autosampler and insert your sample

6) Define your experiment in that slot and press “submit”
Running on the AV400

Submitting your sample

Currently running sample

Queued

Next available slot

Finished experiments

Currently running sample

Next available sample position
### Running on the AV400

**Submitting your sample**

<table>
<thead>
<tr>
<th>Experiment number</th>
<th>Sample folder name</th>
<th>solvent</th>
<th>parameters</th>
<th>research lab</th>
<th>day/night queue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finished</td>
<td>/home/nmr1 CHY174A</td>
<td>1</td>
<td>PROTON</td>
<td>Guan</td>
<td>00:01:29</td>
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<tr>
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<td>PROTON</td>
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<td>00:01:29</td>
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<tr>
<td>Running</td>
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<td>1</td>
<td>F19_BBDF</td>
<td>Liu</td>
<td>00:00:50</td>
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<tr>
<td>Queued</td>
<td>/home/nmr1 10-7-ph-BOH2-5-1h</td>
<td>1</td>
<td>PROTON</td>
<td>Sun</td>
<td>00:01:29</td>
</tr>
</tbody>
</table>

- Provide a name for your sample folder—multiple experiments (1H, 13C etc) will be deposited in numbered subfolders
- Specify solvent—incorrectly specified solvent will cause lock to fail and/or spectrum to be badly referenced
- Contact me to run experiments other than basic 1H, 13C 1Ds
- Some parameters can be adjusted, but be careful!
- Check experiment length before pressing “submit”
Running on the AV400

Checking on the status of your and others’ experiments

- Type http://chav400.cros.uc.edu:8015 in web browser while on campus
- Username is your AV400 computer username, password is “chemistry”
- “Read only” except make sure not to stop the queue