# TROUBLESHOOTING ON BRUKER INSTRUMENTS

General notes

On the Bruker 500, three errors cause the queue to stop. On the Bruker 400, only one error is enough to cause it to stop. In either case, an email is sent to Robin. But, sometimes the errors are minor (eg missing sample or unshimmable sample), and also, sometimes it is quicker to try the below steps.

To get the instrument back in working order, follow the below steps in order as far as possible

Queue errors

### 1. Is IconNMR running? If so, click Change User, then log back in

IconNMR is the automation interface:
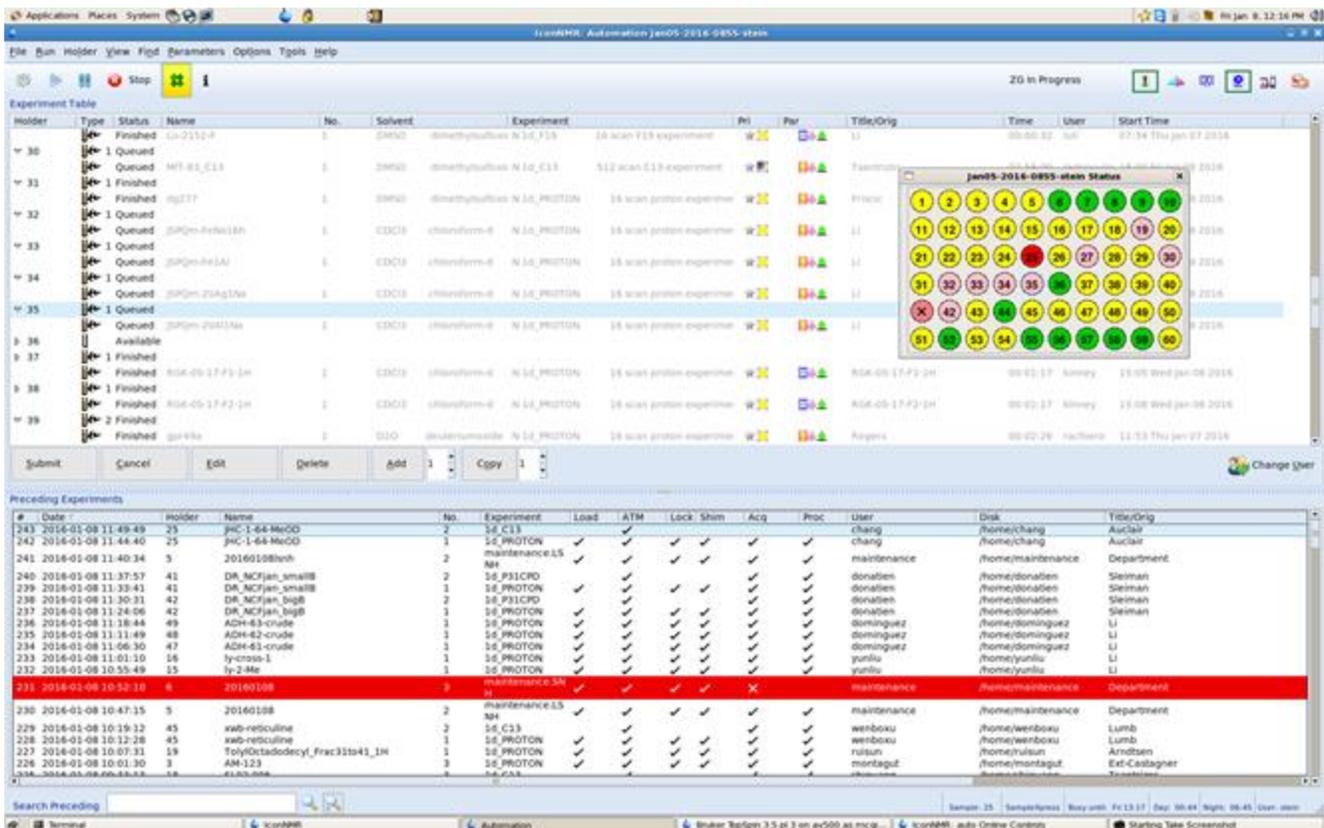
Clicking Change User and logging back in will restart the queue if it has stopped. If the queue stopped because it couldn't find samples or because a sample or samples were unshimmable, then restarting the queue will work to get the spectrometer going again. If there is a more serious issue, however, this will not be enough.

2. Is TopSpin running? If so, close it by closing the Terminal window. Then go on to Step 3.

TopSpin is the program used for processing spectra. It is also in charge of automation, although IconNMR is usually used as a front end to TopSpin:
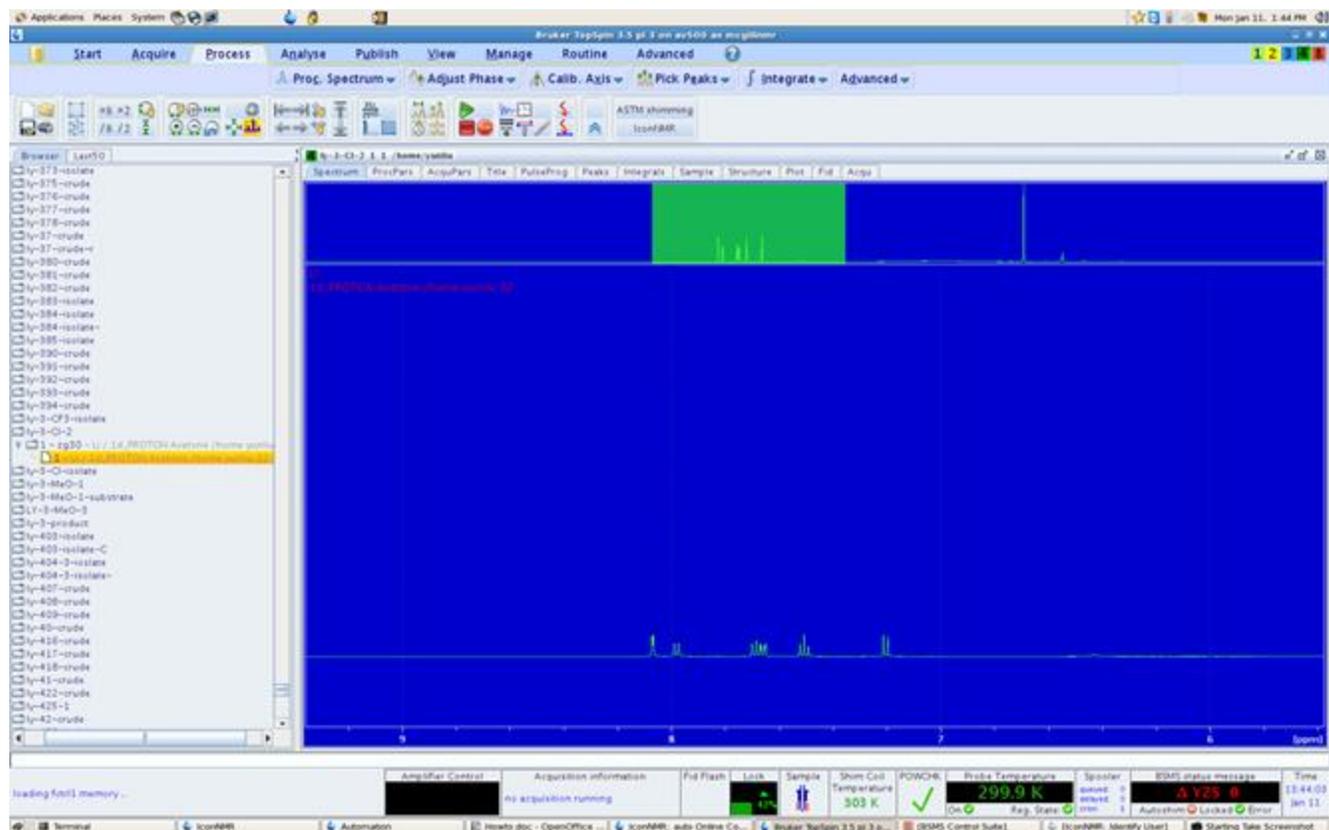
The Terminal window is open whenever TopSpin is running. To close it, just click on the upper right corner of the window:
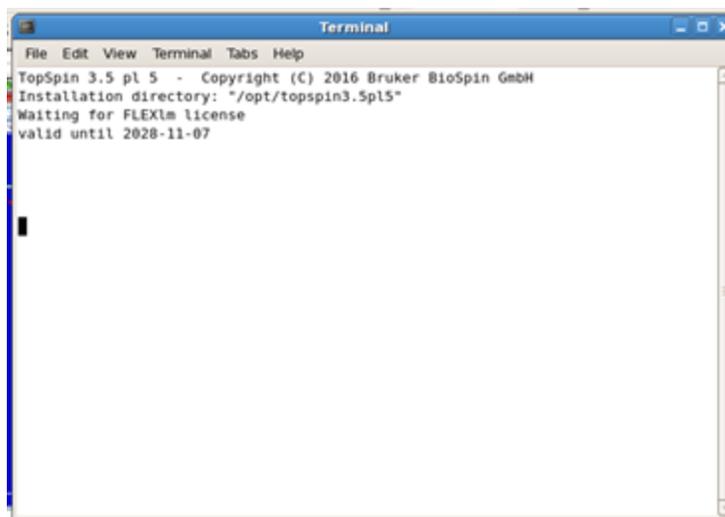
TopSpin can sometimes take a few seconds to close all background processes, so wait some time before starting TopSpin again (Step 3).

3. Start TopSpin if it is not running or if you closed it in Step 2. Log in to IconNMR when prompted.

Use the icon at the top of the screen or the icon on the Desktop to restart TopSpin:


After some seconds, IconNMR will start, and there will be a prompt to log into IconNMR. Use your normal login and password, and the queue will start again. If there were samples queued previously, go to Step 4.

4. If there was a queue operating previously with samples waiting to be run, click Stop at the top of the IconNMR window. Then go to the IconNMR File menu and choose option 1. Then click Start.

Restarting IconNMR, as in Step 3, leads to a new run being started. If there were no samples queued previously, then it is fine to continue with this new run. But, if there were samples queued previously, you should:

Stop the current run by clicking on the red Stop icon:
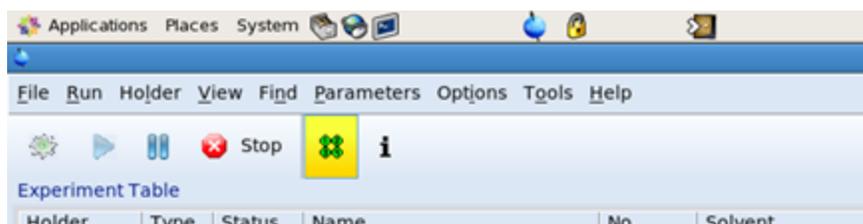
Then go to the File menu and choose the first run listed (or type 1):
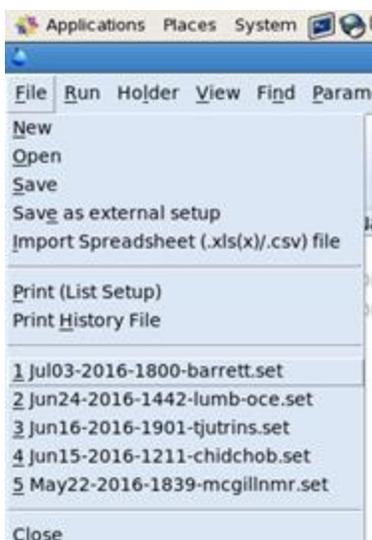
Now, start the run that is loaded by clicking on the Start icon:

Now IconNMR should be working again from where it left off.

5. If the above steps do not work, and/or you are at all confused, contact the Facility Manager

Robin's office phone (514-398-6219) usually forwards to her cell phone, or you can send an email: robin.stein@mcgill.ca.

If the instrument is in a state where it cannot be used by anyone, please leave a note at the spectrometer. Also, if the Bruker 400 is unusable, please go on FACES and block out the next few hours or overnight.