

# Use of the DPX400 via IconNMR

## Startup

IconNMR is typically left running on the left-hand screen. It has a green background.

## IconNMR Main Desktop

Click on *Routine Spectroscopy*.

## IconNMR Routine Spectroscopy Screen

Click on the *identify user* icon. If you are a member of a research group, select your group and enter your password. If you are a walk-on user, select *walkon* and enter the password *nmr*.

## IconNMR Flowchart

All items in the flowchart must have green borders in order for an experiment to run. Visit all items in the flowchart in sequence.

**Inject/Eject:** Click on *Insert New Sample*. The current sample will be ejected. Remove the sample from the stack, then remove the spinner collar, place it on your sample. Use the clear plastic depth gauge to set the correct position of the spinner collar. Place your sample on the stack (you may need to use the aluminum step ladder). Click on OK.

**Filename:** Click on *Names* to obtain a filename. Fill in all of the boxes. Some users have the option of specifying the disk drive on which their data will be written—the box labeled *Disk Unit* should be set to *opt* to access the local drive. Click on OK.

**Set Solvent:** Select the solvent used to prepare your sample. Click on OK.

**Set Experiment:** Select the experiment you wish to run. An annotated list is appended. You may also set the title of the plot.

**Modifying Parameters:** Some users have additional privileges. If you want to lock and shim by hand, pull down the *Options* menu at the top of the screen and select *Manual Lock/Shim*. If you want to change a parameter, click on the *Status* triangle on the Online Controls panel, click on the *Parameters* bar at the top of the flowchart, pull down *Edit Parameters*, then select the parameter you wish to change. You must first define the solvent and the experiment before you can modify parameters.

**START:** Click on this icon to start the experiment.

### Acquisition in Progress Window

The buttons in this window may be used to observe the lock signal, FID, and spectrum in real time. Previously acquired spectra may be viewed with the *Search* button.

The Acquisition Progress Icons allow you to track the progress of the experiment.

### All done?

When the experiment is done your spectrum will be plotted. You can click on the EXIT button and you will be returned to the Inject/Eject panel.

- If you want to run another experiment on the same sample, click on *Use Same Sample*.
- If you want to run an experiment on another sample, click on *Insert New Sample*.
- If you are done acquiring spectra and someone else is waiting to use the instrument, click *Eject + Terminate*.
- If you are all done and no one is waiting to use the instrument, click on *Insert New Sample*. Place the reference tube in the collar on the top of the magnet, then click on OK. From the FILE menu select *Exit to IconNMR*.

## Adjustable Parameters

d1	relaxation delay
ej	eject sample
ij	inject sample
ns	number of scans
rg	receiver gain
ro	sample rotation on/off