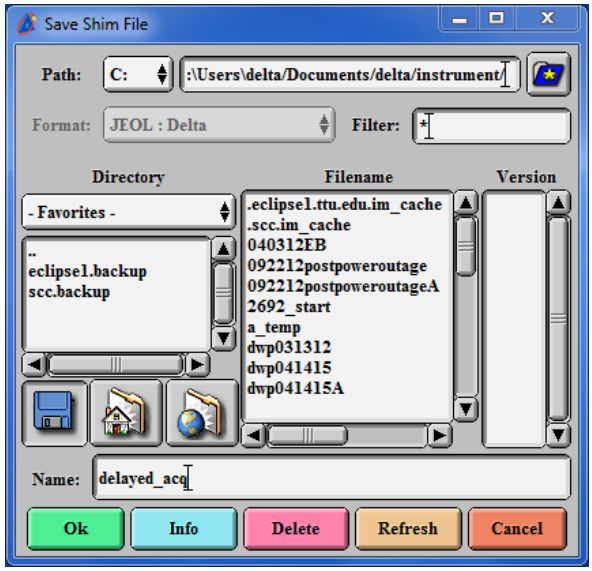
JEOL – ECS 400 – Delayed Data Acquisition

1. Insert the sample, select the solvent, auto-lock and gradient-shim as described in *1D NMR Measurement Set-up and Protocol*.
2. In the **Sample** window, click on the 

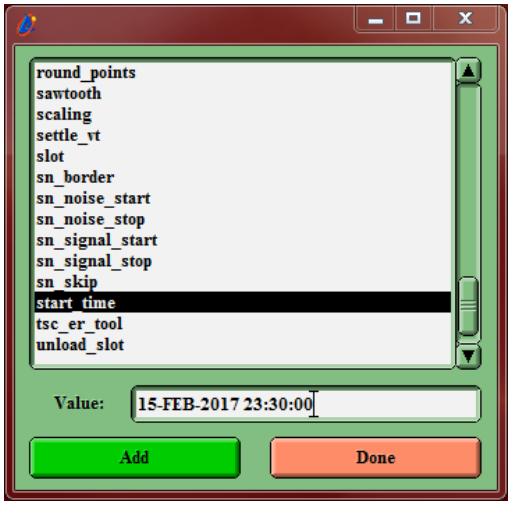
button and then on  . This will open **Save Shim** dialog box:



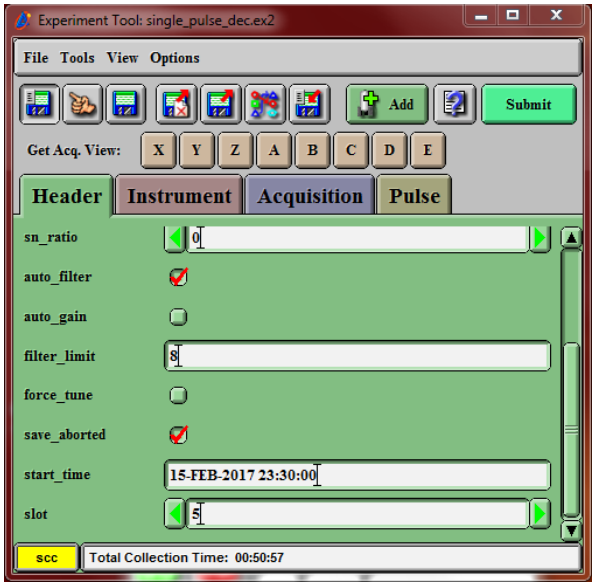
In this box, click on the  button in order to save shims to your home directory, enter *Name* (in this example *delayed_acq*), and click on **OK**.

3. As described in *1D NMR Measurement Set-up and Protocol*, create the experiment you need to run and adjust parameters like number of scans, relaxation delay…etc.
4. In the **Experiment** window / **Header** tab, click on the 

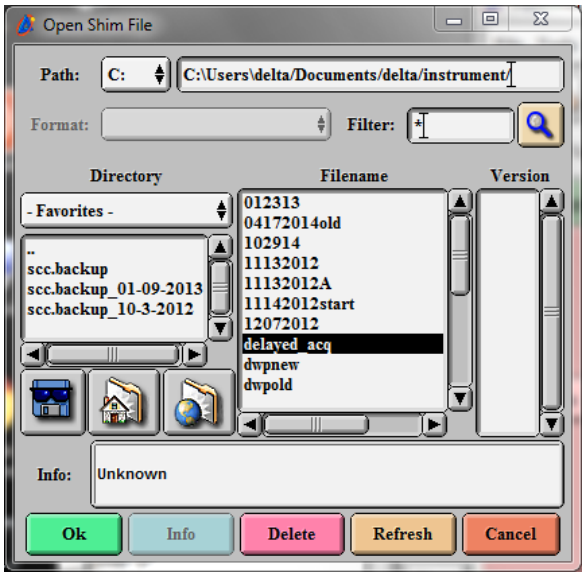
button. The following box opens:



Scroll down the list to **start_time**, enter the time that you want your experiment to start (in 24-hour format – in this example I requested February 15th, 11:30 pm). Click on **Add**.
[If you need to run several experiments on the same sample, enter the same **start_time** for all of them. The **start_time** is just the earliest time the experiment can start.]
REMEMBER TO RESERVE SPECTROMETER TIME IN THE FACES SYSTEM!
Scroll down to **slot**, enter the number for your sample location (e.g. *5*), click on **Add**, and then on **Done**. After this, **Experiment/Header** should look like that:



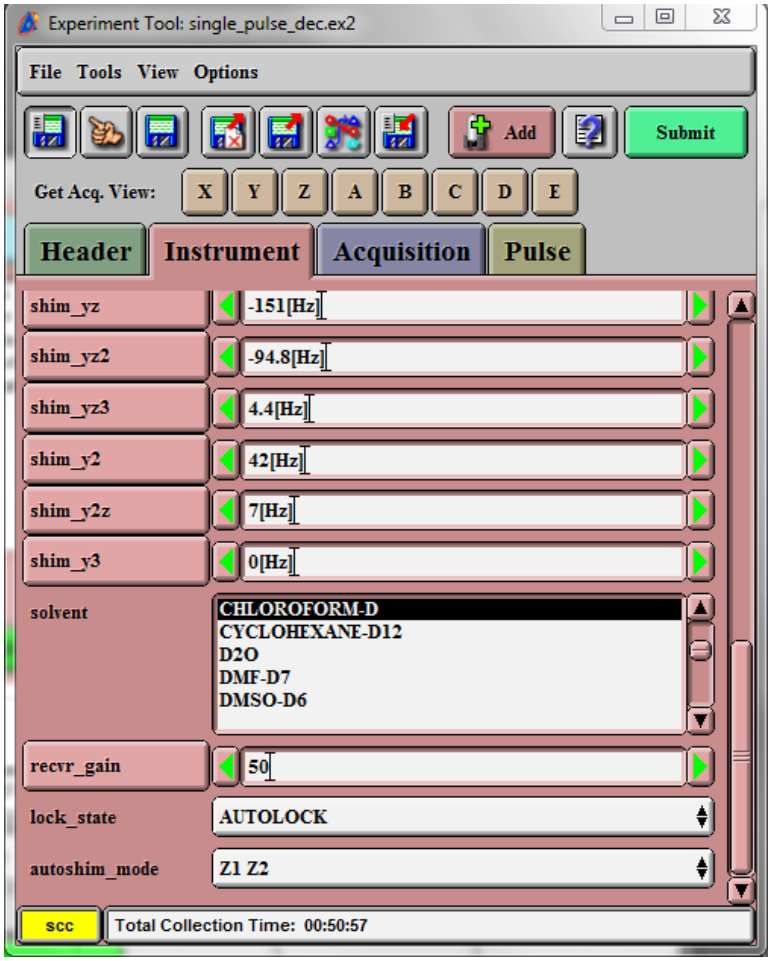
5. Switch to the **Experiment/Instrument** tab and select **File->Get Shims** menu item. This will display **Open Shim File** dialog box:



Find in your home directory the shim file you saved in step 2 (e.g. *delayed_acq*). Select it and click on **OK**.

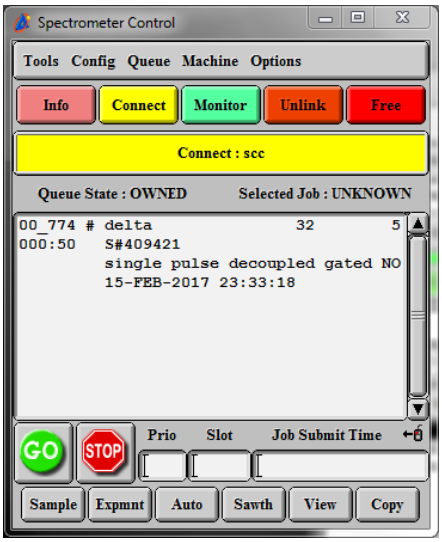
6. Click on the 

button. Find and select **lock_state**, click **Add**. Find and select **autoshim_mode**, click **Add** and **Done**. In the **Experiment/Instrument** tab, set **lock_state** to **AUTOLOCK** and **autoshim_mode** to **Z1Z2**. Your **Experiment/Instrument** tab should now look more or less like that:



7. Click on the 

button. The experiment is added to the queue which is confirmed in the Spectrometer Control window:

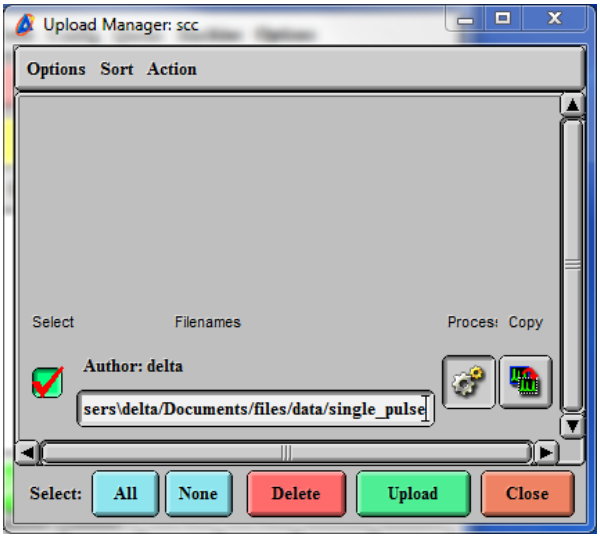


Note that the time displayed for this job is slightly different from your setting. This results from lack of time synchronization between the workstation and the spectrometer console which usually causes no problems.

You can now submit other experiments. They will be added to the queue but will all display the same start time. Of course, they are going to be executed consecutively, according to the submission order.

8. If needed, the experiment can be removed from the queue by selecting corresponding job and clicking on the 

button.
9. You can now reload standard sample, disconnect from the console, exit Delta and logoff from the Windows account.
10. After the experiment(s) is done, log back in, open Delta, and reconnect to the console. **Upload Manager** window opens automatically:



Click on the green square under **Select** in order to select it and then click on the **Upload** button. Your data will be uploaded to the workstation and the spectrum will open in data processor. Remember to remove your sample from the probe or (if someone already loaded another sample) from the sample changer.