

## Using the Sample Changer (SMS)

When you log in as an automation user (username = chemlab, organic, plnu, miramar or grossmnt), the default setup assumes you wish to use the sample changer (traymax=50) so the spectral window comes up with 50 circles on it. If the sample holder tray (on the platform) is empty and you wish to fill it with samples, you should clear the automation window by accessing the Utilities pulldown and select “New automation run ...” (this will make all of the circles on the screen turn **gray**).

- 1) Inspect the sample tray/robot arm: NOTE: the robot arm does not retrieve the last sample that was run via the autosampler. Instead, it leaves the last sample it placed in the magnet and then rests the robot arm over the position where the sample belongs in the sample tray.  
**You should not, therefore, place a new sample in this position!**
- 2) Decide which sample positions you wish to use, place the sample tubes in the spinners (2<sup>nd</sup> top drawer from the far right in the cabinet behind the 400) and carefully place them in the appropriate positions in the sample tray.
- 3) Back at the workstation, you can now select your sample locations (by clicking on each circle where you have loaded a sample; after clicking on the first spot hold down the <shift> key to select other spots.)
- 4) Once you have selected your sample positions, enter the sample name and select the solvent. Next, choose the experiment(s) you wish to run on each sample.
- 5) If you are submitting your samples to run immediately, you may click on Submit DayQ. If you wish your loaded samples to run overnight (beginning at 6:00 pm), you may click on Submit NightQ.

NOTE: While the samples are running, the selected position circles will turn **yellow**; when the data has been collected on a particular sample the circle turns **green**, and when there is any kind of error collecting a sample the circle turns **red**. The autosampler has a tendency to give errors on about 10% of the samples run in any group of samples. As well as the circle turning red, the experiment line in the automation window will also give an **ERROR** next to the sample name and the **Proton** line below the sample name will be red. For these samples, you will simply have to run them again, either individually or as another small group on the autosampler (using unused positions).