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To: Harwood, John S <jharwood@purdue.edu>; Bertram, Donna L <dbertram@purdue.edu>; Mo, Huaping <hmo@purdue.edu>

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Dear NMR Users,

Please be advised that the new NEO500-1 spectrometer in 367 WTHR is now open for use. I apologize for the lateness of this email, but we encountered a couple of complications during the installation and setup processes.

If you used the DRX500-1 spectrometer during the last four months (according to iLab records) your account will be already set up on the new NEO system. If you had not used the DRX500-1 but would like your NEO500-1 access set up, please email both Dr. Harwood (jharwood@purdue.edu) and Ms. Bertram (dbertram@purdue.edu) and we will set it up for you.

At least until September 6 the NEO500-1 will be free to use. Therefore, you do not need to log in to iLab to use the spectrometer. You will log in to the NEO500-1 host computer using your Purdue career account credentials in the same way you log in to the AV400 and AV800 hosts.

After ca. September 6 you will need to start an iLab session BEFORE attempting to log in to the NEO500-1 host.

After you log in to the NEO500-1 host, double-click the TopSpin icon on the desktop to start TopSpin. This system uses the latest version of TopSpin, 4.3.0, which looks a bit different from that on our AV spectrometers. ATMA and topshim are available.

The FIRST TIME you use TopSpin on the NEO500-1, execute the following command using the text command box, making sure to include the spaces:

```
re first 1 1 /opt/topspin/data/userid/nmr
```

(userid = the Purdue ID you used to log in to the NEO500-1 host)

This will load your first dataset and set the edc menu parameters correctly.

Most of the standard PINMRF parameter sets (1H, 13C, 31P, 15N, 29Si, 11B) are ready to use. If you used parameters for another nucleus on the DRX500-1 you will need to contact PINMRF staff about getting this set up on the new system. Note that the L-N₂-cooled Prodigy cryoprobe on the new NEO500-1 is ca. 3x more sensitive than the conventional probes on the AV400 and the previous DRX500-1. This results in a ca. 10-fold reduction in data acquisition time for low-sensitivity experiments such as 13C observation.

If you have any questions or comments please feel free to contact us.

Thank you,