Dear NMR users,

A new composite experiment is now available on the 400 MHz named **MP_NOAH3_SBC.**

It is similar to the "**FULL_ANALYSIS**" composite experiment but in this case, 2D experiments (HSQCed, HMBC and COSY) are combined into an NMR "supersequence" (**NOAH – NMR by Ordered Acquisition using 1H-detection**)[1] that can be recorded in a single measurement involving a single recovery delay.

The data collection time is considerably reduced (25 minutes). Usually when running the individual experiment COSY, HSQC and HMBC experiments with 2 scans, the total experimental time is of 45 minutes.

Below are instructions for use of the supersequence NOAH in iconNMR:

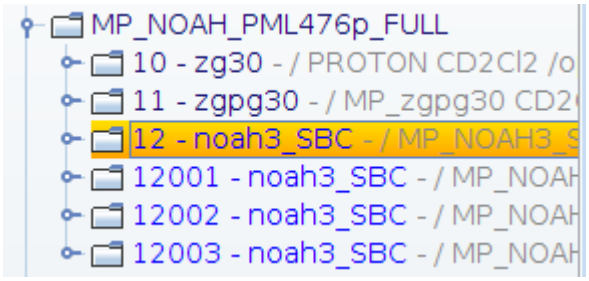
A new composite experiment was implemented on both 400 and 500 MHz spectrometers: **MP_FULL_NOAH3_SBC**

Once having selected the **MP_NOAH3_SBC** composite within IconNMR, the following three experiments (1H, 13C and NOAH) will appear:

| Holder | Type | Status | Disk | Name | No. | Solvent | | Experiment |
|---|---|---|---|---|---|---|---|---|
| 1 | 3 | Available | | | | | | |
| | | Available | /opt/nmrdata/service | MP_NOAH | 10 | CDCl3 | chloroform-d | N PROTON D 1D 1H Normal (NS=16 |
| | | Available | /opt/nmrdata/service | MP_NOAH | 11 | CDCl3 | chloroform-d | N MP_zgpg30 |
| | | Available | /opt/nmrdata/service | MP_NOAH | 12 | CDCl3 | chloroform-d | N MP_NOAH3_SBC |
| | | F2 | /opt/nmrdata/service | MP_NOAH | 10 | | | |

For **MP_NOAH3_SBC** HSQC, HMBC and COSY experiments will be run **at once within 25 mins**. At the end of the acquisition, an automatic script splits the single NOAH data set into 3 individually processed 2D data sets.

For example, if the NOAH experiment is acquired in EXPNO 12, it will produce data sets numbered:
- 12001 (HSQC)
- 12002 (HMBC)
- 12003 (COSY)




[1] E. Kupce, T. D. W. Claridge, Chem. Commun., 2018, 54, 7139.