Protocol for 1H NMR at NMR400 (AV NEO 400) Version 001

June 12, 2019 set up by Fu Chen

Book time and log in computer as usual

Ah1
30 degree pulse angle for routine H-1

Procedure:
Open Topspin 4.0.6

A. Under "Acquire",
1. create dataset (**new** or **edc**): name; exp #; directory (D:\group name\user name\yrmo); solvent
2. Read a parameter set (**rpar Ah1**)
3. eject sample (**ej**); wait for air flow (no air, no sample); load sample; insert sample (**ij**)
4. (**lock**): select the right solvent
5. Manually tune (**wobb**) and (**stop**)
6. no spinning
7. Read a shim file (**rsh shim.current**); shim (**topshim**)
8. prosol (**getprosol**)
9. gain (**rga**)
10. check parameters: (**ns**), (**ds**), and (**d1**)
11. run (**zg**)

B. Under "Process",
12. Data process and phase correction (**efp**;**apk**)
13. adjust phase if necessary
14. adjust baseline if necessary
15. calibrate spectrum

C. Under "Analyse",
16. pick peaks
17. integrate
18. others if necessary
19. eject sample (**ej**) and then (**ij**) to turn off air
20. Put the cap back

d1 is relaxation time in seconds
ds is dummy scans for warming up the spin system
ns is number of scans

Remark:
- lock and shim well
- tune probe
- no spinning
- no pulse cal in automation
- optimize offset (**o1p**) and spectral width (**SW**) for advanced applications

Follow the basic procedure from your basic H1 training.