Protocol for 1H NMR at AM400 (AV III HD 400 NanoBay)

Version 001

June 24, 2019  set up by Fu Chen

Procedure:
Book time and log in computer as usual
Take cap off from magnet first
Open Topspin 3.6.1

Ah1
30 degree pulse angle for routine H-1

A. Under "Start",
   1. create dataset: name; exp #; pro #; solvent; directory (D:\group name\user name\yrmo)
   2. rpar Ah1
B. Under "Acquire",
   3. eject sample (ej); wait for air flow (no air, no sample); load sample; insert sample (ij)
   4. lock: select the right solvent
   5. tune (atma)
   6. no spinning
   7. rsh shim.current; shim (topshim)
   8. prosol (getprosol)
   9. gain (rga)
   10. check: ns, ds, d1
   11. go (zg)
C. Under "Process",
   12. efp;apk
   13. adjust phase if necessary
   14. calibrate spectrum
   15. pick peaks
   16. integrate
   17. advanced if necessary
D. Under "Analyse"
   18. eject sample (ej); take sample; ij to close air
   19. close topspin
   20. log off
   21. put cap back on magnet

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 SW (ppm) for advanced applications