

Feb 24, 2022

## HSQC or HMBC NMR at AM400 (AV III HD 400 NanoBay)

### Procedure:

Open Topspin 3.6.1

### run H-1 NMR and C-13 prior to HSQC or HMBC NMR (Ah1)

#### run HSQC or HMBC NMR

1. find (**o1p**) and (**sw**) from 1H and 13C NMR spectrum
2. run (**pulsecal**) on 1H NMR dataset
3. create two datasets: name; exp #; pro #; solvent; directory (D:\Chem471\user last name\yrmo)
4. (**rpar A2d\***) for each dataset (select A2d\_HSQCETGPSISP2.4 or A2d\_HMBCGPLNDQF)
5. no eject sample/no insert sample
6. no lock
7. no spinning
8. no shim
9. for each dataset:
  - prosol (**getprosol**)
  - input (**o1p**), (**sw**), (**p1**), (**ns**), (**ds**), (**d1**), (**TD**) for both 1H and 13C into HSQC or HMBC dataset
  - run (**rga**) to obtain rg value
10. (**multizg**); type (**2**)
11. for each dataset:
  - (**xfb**)
  - internal/external projection
  - adjust phase if necessary
  - calibrate spectrum
12. eject sample (**ej**); take sample; (**ij**) to turn off air
13. close topspin
14. log off
15. **put cap back on magnet**