

Bruker Avance / ARX NMR Spectrometers

Basic Spectrometer Operation – Quick Reference Guide

Login and startup

Login to SGI with username and password
xwinnmr (in unix window) – start XWinNMR program

Setup

edc – enter new dataset name and expno
rpar h1 .prob.solv (prob = cryo (500-1), bbo or txi (500-2), qnp (300,400))
ased – check / edit acquisition parameters

Change sample

lockdisp – open lock display window
remove sample using keypad – turn off lock and shim, use (shift) lift key to eject
change sample, set sample depth, clean
insert sample – turn off eject, start spin on keypad
lock_solv (solv = acet, cdcl, d2o, dmsol, meth)
shim Z1, Z2, Z3 using keypad

Acquisition

acqu – switch to FID display
rga – set receiver gain (not for C13)
zg – acquire FID (use halt to stop acquisition, if needed)

Processing and plotting

edp – check / edit processing parameters
ef – Fourier transform
PHASE button – phase spectrum with mouse
CALIBRATE button – check / set chemical shift reference
DPI button – define displayed region of spectrum for plotting
cy – adjust y-scale of plot
setti – open text editor to edit plot title
pps – view peak pick listing on screen
mi – adjust peak picking threshold
INTEGRATE button – enter integration subroutine
view – view plot output on screen
plot – plot to paper

Finish-up and logout

change sample and insert standard CDCl₃ sample
standard – set up and lock on standard sample (touch up shims after locking completes)
close lock window – use QUIT button in lower-right-hand corner of window
edc – read a proton dataset
ii – initialize spectrometer to proton
exit – exit XWinNMR
right-click on display background, select LOGOUT and confirm – logout from SGI