

## 在 Xwinnmr 中如何測量液氦的準位

1. 在開啟 XWINNMR 後,選取任一光譜並在命令列中鍵入 bsmsdisp



2. 出現下面視窗後,點選 level

K BSMS Display Version 1.0.0				
Display Options	s <u>S</u> ervice			Help
Level	Lock	Sample	Shim	AutoShim



 點選 HELIUM MEANS,程式就會自動偵測液氦的準位並於 12 秒後 將準位顯示在 ACTUAL 的空格

選擇 HELIUM LEVEL,程式會顯示上次測量液氦的準位,顯示在 PREVIOUS 的空格

×	Level Panel	X
	ALARM LEVEL	DE-ICE
	HELIUM	HELIUM MEAS
	FREVILIES	ASTISAL



## 在 Topspin 中測量液氦的準位

- 1. 開啟 topspin1.3
- 2. 開啟一圖譜



3. 在命令輸入列中鍵入 bsmsdisp





4. 此時出現 BSMS Control Suite 視窗

Bruker TOPSPIN 1.3 on casper as Administrator	
File Edit View Processing Analysis Options Window Help	
🗋 😁 🖻 📾 🖻 🖺 ld 3d 🍫 🗞 📩 🖄 🛰 🏷 捲 🕂 📾 🎯 🖬 🔗	1 2
*2 /2 *8 /8 ≑ *X 至	R
BSMS Control Suite	
Main Lock Sample & Level Shim Autoshim Service als Sample Structure Fid	
AUTO	
Phase Power Gain Lock	
Lock Phase Power Gain	- 10
SAMPLE ····································	F
	- 9
SHIM	-
	- 8
$Z^2$ $XZ$ $YZ$ $Z^3$ $XY$ $X^2$ - $Y^2$	-
	- 8
Previous Actual	
Absolute Step +	- 8
	· ·
Stepsize 1 10 100 193 194	- 0 - 0
	-
	-
Sample: down missing up	_
() () () 4 2 F2 [ppm]	



5. 點選 Sample &Level 選項



6. 此時將看到 HELIUM LEVEL 裡有三個選項



File Edit View Processing Analysis Options Window Help
□
BSMS Control Suite Image: Control Suite   Main Lock Sample & Level Shim Autoshim Service Is Sample Structure Fid   HELUM LEVEL Read last Measure   SAMPLE SPIN Service   SPIN Measure Calibrate Rate Image: Calibrate Rate   SAMPLE LIFT Image: Calibrate Rate   VALUE Step:   VALUE Step:   Stepsize Image: Calibrate Rate   Stepsize Image: Calibrate Rate   Stepsize Step:   Stepsize St
Sample: down missing up 4 2 F2 [ppm]

## 7. 點選 Measure

BSMS Control Suite
Main Lock Sample & Level Shim Autoshim Service   HELIUM LEVEL Read Read last Measure   SAMPLE SPIN SPIN Measure Calibrate Rate   SAMPLE LIFT LIFT IFT VALUE Previous Actual   Absolute Step + Step size 1 10 100 1e3 1e4
Sample: down missing up



- 8. 等待12秒鐘
- 9. 測量值會出現在 VALUE 裡的 Actual 而 Previous 是之前測量 值
- 10. 如果要再測量一次先點 Read 再點 Measure 再等待 12 秒鐘