#### **CustomQ**



- Provides an interface midway between these very basic choices and the first series of menus.
- The following interface allows anyone to successfully **setup** and **acquire** any desired set of experiments from the full suite of available choices.
- Auto-locking and appropriate gradient shimming are performed automatically

Location: 0 change	SAMPLE:	eject insert Solvent: CDC13	Acq & Obs
Experiment s	election/setup		Decouplers
		INSTRUCTIONS	Sequence
H1 ONLY	C13 ONLY	1. Insert New Sample	Flags & Cond.
H1&COSY	C13 & DEPT	[or enter location and "change"]	Process
		2. Select Solvent	Process2
H1&H1 Detected	C13&C13 Detected  H-C-P-F  P31 ONLY	3. Select Experiment "Group"	Display
		[Customize experiment during dialogs]	display2
		4. Check EXPLIST for time	LCNMR/STARS
		5. Redo dialog, if necessary	Text
F19 ONLY		[Do probe tuning, manual locking, and shimming now, if necessary]	Spare
		6. Start Acquisition	Setup EXP
			CustomQ
EXPLIST Start ACQ	Dialog:		Walkup



#### The Chempack Interface

#### (Foreground Operation)

Location:	0 change	SAMPLE: 0	eject insert Solvent:	Acq & Obs
	Experiment se	election/setup		Decouplers
		Ī	INSTRUCTIONS	Sequence
	HI ONLY	C13 ONLY	1. Insert New Sample	Flags & Cond.
	H1&COSY	C13 & DEPT	[or enter location and "change"]	Process
	HIAGUSI	CIS & DEPI	2. Select Solvent	Process2
	H1&H1 Detected	C13&C13 Detected	3. Select Experiment "Group"	Display
			[Customize experiment during dialogs]	display2
	H1& Selective 1D	H-C-P-F	4. Check EXPLIST for time	LCNMR/STARS
			5. Redo dialog, if necessary [Do probe tuning, manual locking,	Text
F19 ONLY	P31 ONLY	and shimming now, if necessary	Spare	
	1		6. Start Acquisition	Setup EXP
1	1			CustomQ
EXPLIST	Start ACQ	Dialog:		Walkup



## Lock, Shim, Save & Text Options

AutoLOCK: AutoSHIM:	
Directory: Save As:	demofilename
Text:	. <del> </del>
	The initial dialog box in Glide or Chempack experiments
0k	Reset   Exit



## 1D and Experiment Options

PROTON Spectral Width (ppm):	-2->14 -1->11   -0.5->9.5   0.5->8.5   *
Minimize SW?:	NO Auto Manual
PROTON scans:	8 16 32
PROTON Relaxation Delay (sec):	1 2 5 25
PROTON Pulse Angle:	45 Default Set
Select Experiments in addition to PROTON:	COSY gCOSY gDQCOSY
(more):	TOCSY NOESY ROESY
(more):	HMQC gHMQC HSQC gHSQC
(more):	gHMBC HMQCTOXY HSQCTOXY
(more):	gHMQCTOXY gHSQCTOXY
(more):	CARBON
	***  \text{2}  \text{2} \q
_Ok	Exit

4



# Individual Experiment Options

gCOSY s	cans per	inc:	1	2	4	8	1	15
gCOSY n	umber of	inc:	12	8	20	0	256	512
	ОК			_F	les	et	JI	



Once setup, simply clicking the **Start ACQ** button begins the actual data acquisitions!

#### **Dialog Menu**

The Dialog menu allows a chemist to **modify parameters** and *add* or remove queued experiments at any time... **even after the chain of acquisitions have begun (!)**. As always, parameter modifications are posed in chemical terms so that the busy chemist does not have to learn a large set of complex underlying NMR commands.



```
gHSQC Scans per inc: 4 2 8 16 32

gHSQC number of inc: 128 200 256 512

Carbon Spectral Width (ppm): -10 -> 160 -10 -> 190 -15 -> 225 -20 -> 240

OK

Reset
```