

## NMR software DeltaV5.3.2 Introduction of new features ~ “pure shift”(4)~ HSQC

Product used : Nuclear Magnetic Resonance (NMR)

Here we introduce Pure shift HSQC as an example of Pure shift method by using BIRD. Fig.1 shows the Pure shift HSQC which consists of CPMG HSQC<sup>1)</sup> and BIRD. And Fig.2 shows expanded spectra of conventional HSQC and Pure shift HSQC. Conventional HSQC shows no splitting along F1 axis, but splitting due to <sup>1</sup>H-<sup>1</sup>H couplings along F2 axis. The Pure shift HSQC achieved signal simplification by eliminating <sup>1</sup>H-<sup>1</sup>H coupling.

※In these measurements, window function of x axis were set to 1Hz so that original coupling can be confirmed.

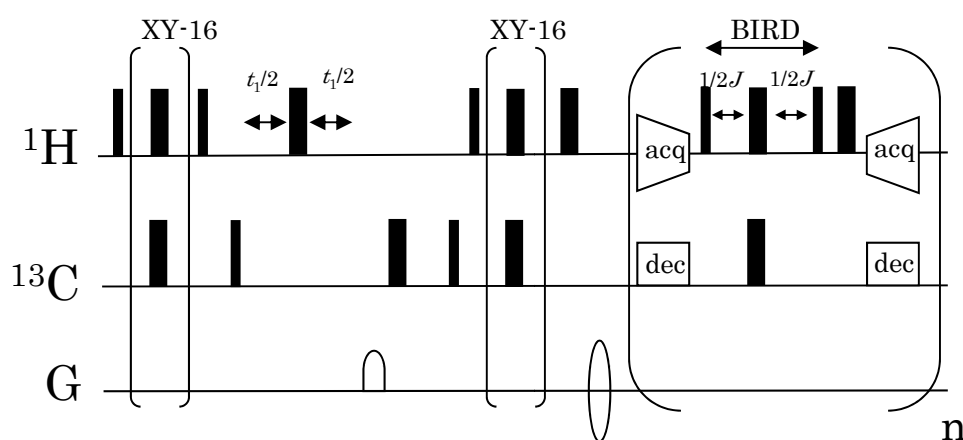


Fig.1: Pulse sequence of Pure shift CPMG HSQC

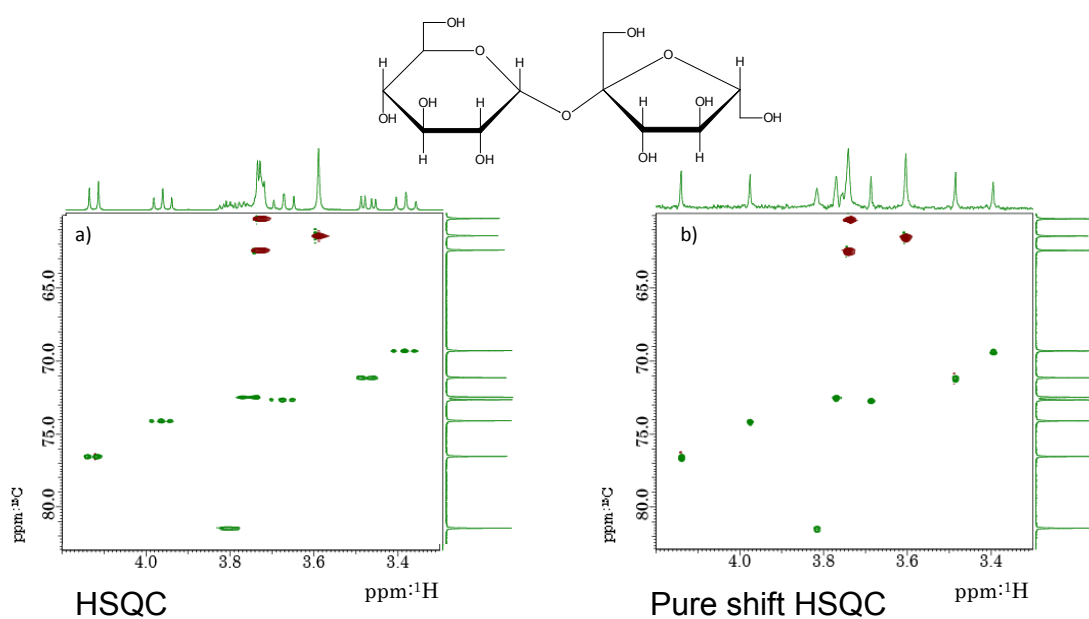


Fig.2: Comparison of HSQC spectra of Sucrose/D<sub>2</sub>O

### Reference

1) *J. Am. Chem. Soc.* 2001, 123, 11306-11307

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