

## NMR Tips - Pureshift - $^1\text{H}$ NMR without couplings

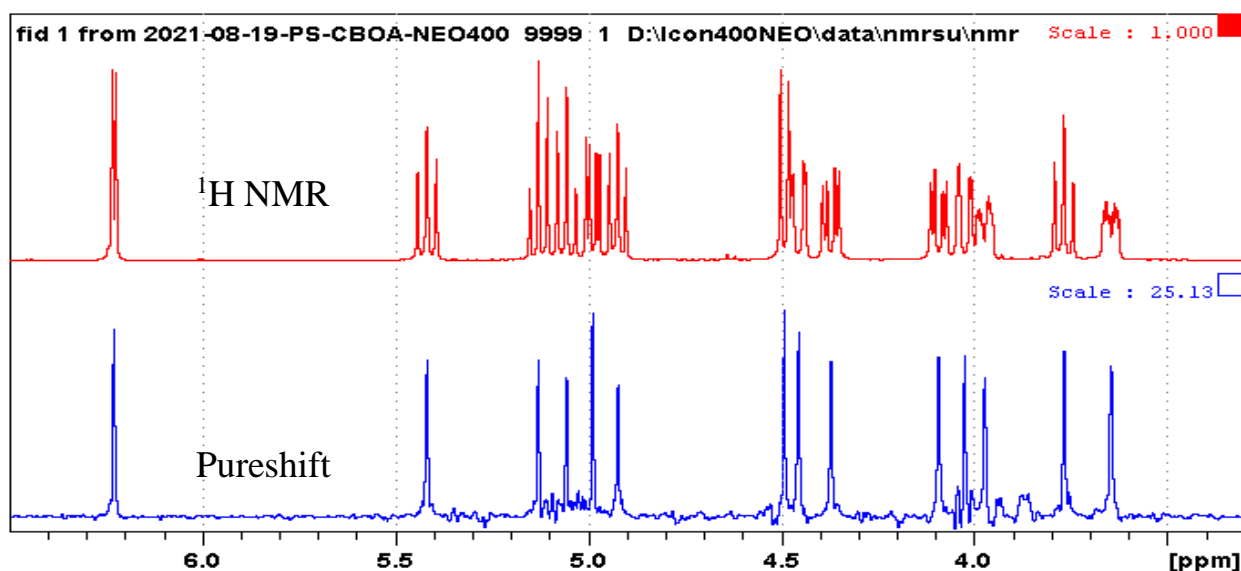
Molecules that contain many different hydrogen atoms will usually show complicated multiplet structures and/or overlapping signals in their  $^1\text{H}$  NMR spectra. The Pureshift experiment can remove these couplings and will collapse all  $^1\text{H}$  multiplets into individual peaks.

This ~10-minute experiment can now be selected from the automation menu and works best with reasonably concentrated, pure samples.

Pureshift spectra are not quantitative and strong solvent signals may generate significant artefacts.

The two examples below show the Pureshift results of crowded  $^1\text{H}$  NMR regions:

### **Test sample #1: 100 mM cellobiose octaacetate in $\text{CDCl}_3$**



### **Test sample #2: 200 mM Cholesterol in $\text{C}_6\text{D}_6$**

