

Supporting Information for:

The Conformational Rigidity of Butane-1,2-Diacetals as a Powerful Synthetic Tool

Emilio Lence, Luis Castedo and Concepción González-Bello*

Laboratorio de Química Orgánica (CSIC) y Departamento de Química Orgánica, Facultad de Química, Universidad de Santiago de Compostela, Avenida de las Ciencias s/n, 15782 Santiago de Compostela, Spain. E-mail: cgb1@usc.es

Typical ^1H NMR spectra for butane-1,2-diacetal derivatives have four singlets, two corresponding to the methoxyl groups ($\sim 3.4\text{--}3.2$ ppm) and two of the methyl groups ($\sim 1.2\text{--}1.4$ ppm) (Figure 1). As an example the ^1H NMR spectra of compounds **29** and **74** are shown in Figure 2.

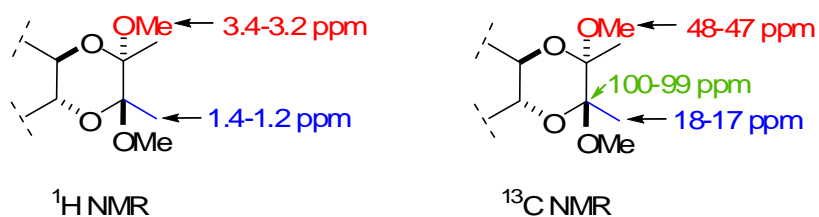


Figure 1

The ^{13}C NMR spectra for butane-1,2-diacetal derivatives usually have six signals: two at $\sim 100\text{--}99$ ppm of the quaternary centers, two at $\sim 48\text{--}47$ ppm of the methoxyl groups and two at $\sim 18\text{--}17$ ppm corresponding to the methyl groups. An example is shown in Figure 3.

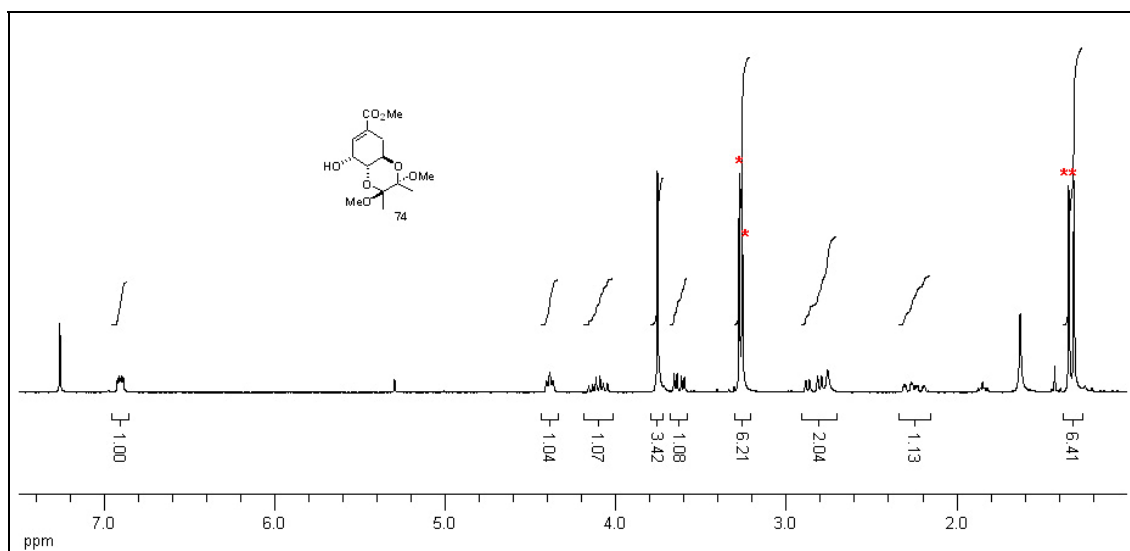
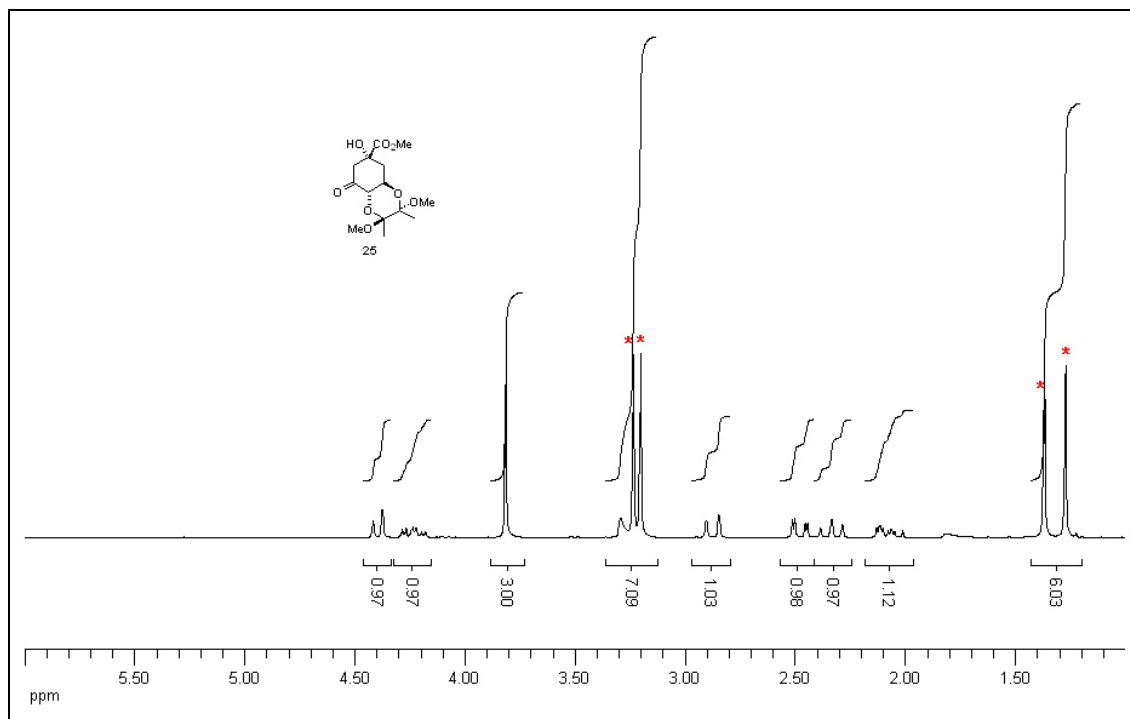


Figure 2. ¹H NMR spectra of compounds 25 and 74.

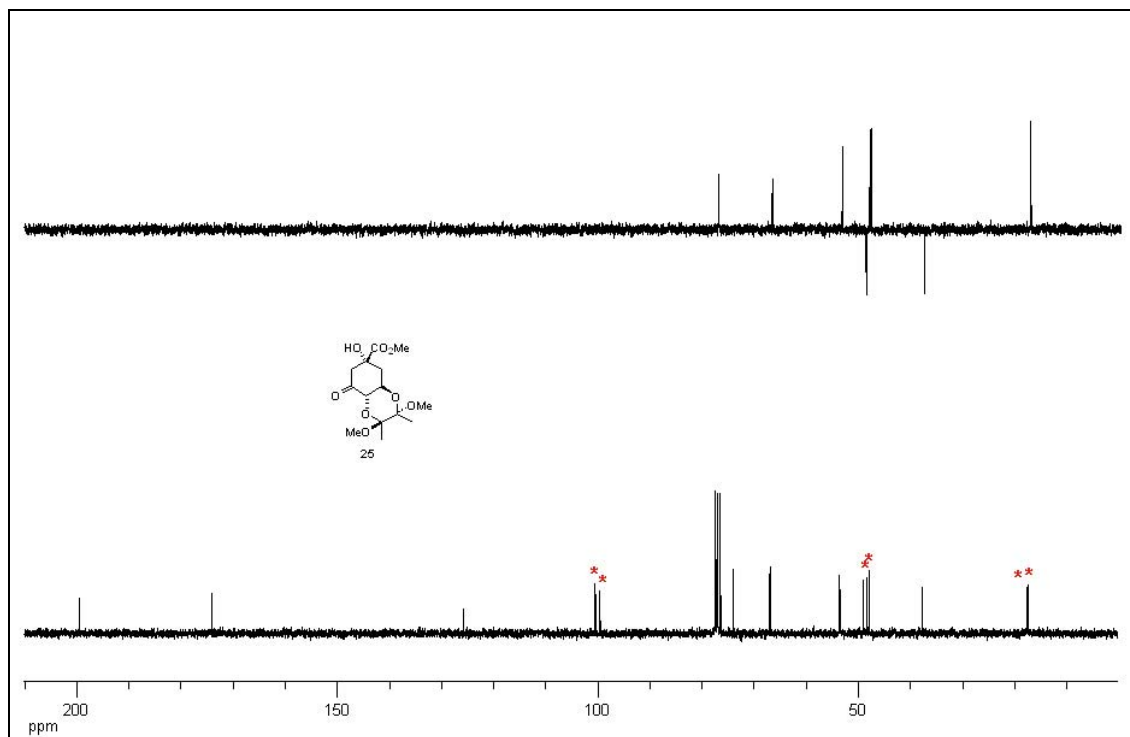


Figure 3. ^{13}C NMR and DEPT spectra of compound **25**.