

ROYALprobe™ HFX for 700MHz console is newly released

Product used : Nuclear Magnetic Resonance (NMR)

ROYALPROBE™ HFX has been provided for 400, 500 and 600MHz NMR, and it is widely appreciated from the customers in the various fields. Here the ROYALPROBE™ HFX is newly released for the 700MHz NMR. As was announced, the unique feature of the probe is to switch between single and dual tune mode on the HF ($^1\text{H}/^{19}\text{F}$) coil, which make the user to perform triple resonance ($^1\text{H}/^{19}\text{F}/\text{X}$) experiments even with the 2ch console without compromising on its performance. Such triple resonance experiment (i.g. $^{13}\text{C} \{^1\text{H}, ^{19}\text{F}\}$) is inevitable for the accurate structural analysis on the fluorine compounds (Fig. 1, Fig. 3). The higher field operation may help to gain sensitivity and resolution (Fig 2, Fig. 3).

Fig.1 : Various ^{13}C NMR experiments

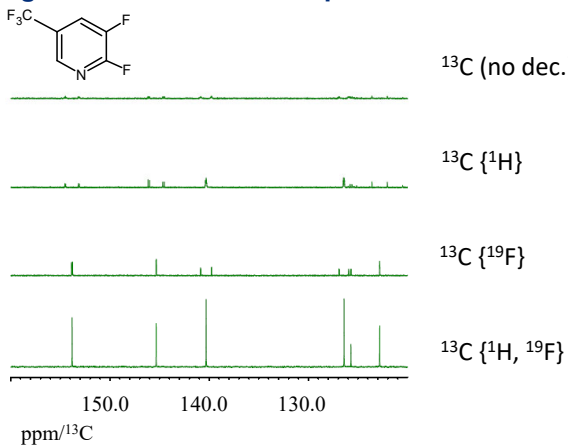


Fig.2 : ^{13}C sensitivity enhancement by high field NMR system

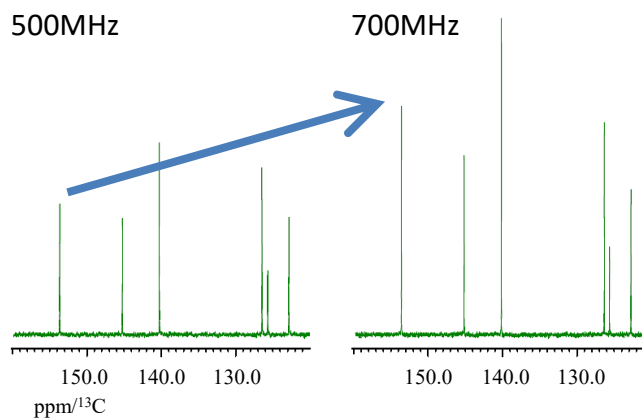
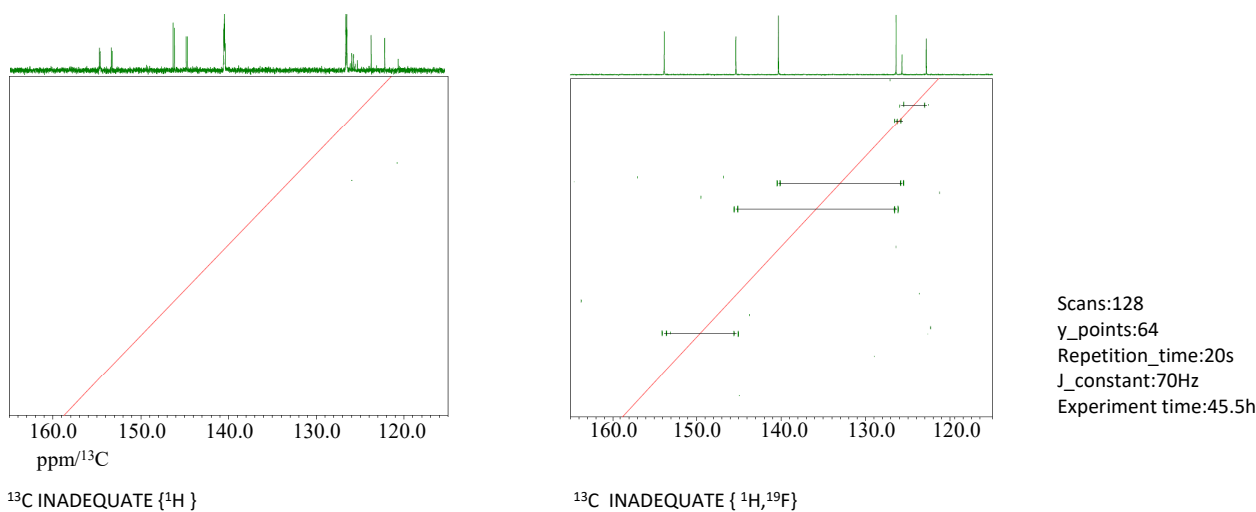


Fig.3 : ^{13}C INADEQUATE experiments of double resonance and triple resonance



All experiments were performed by using 100mg 2,3-difluoro-5-(trifluoromethyl) pyridine in $\text{DMSO}-d_6$.

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