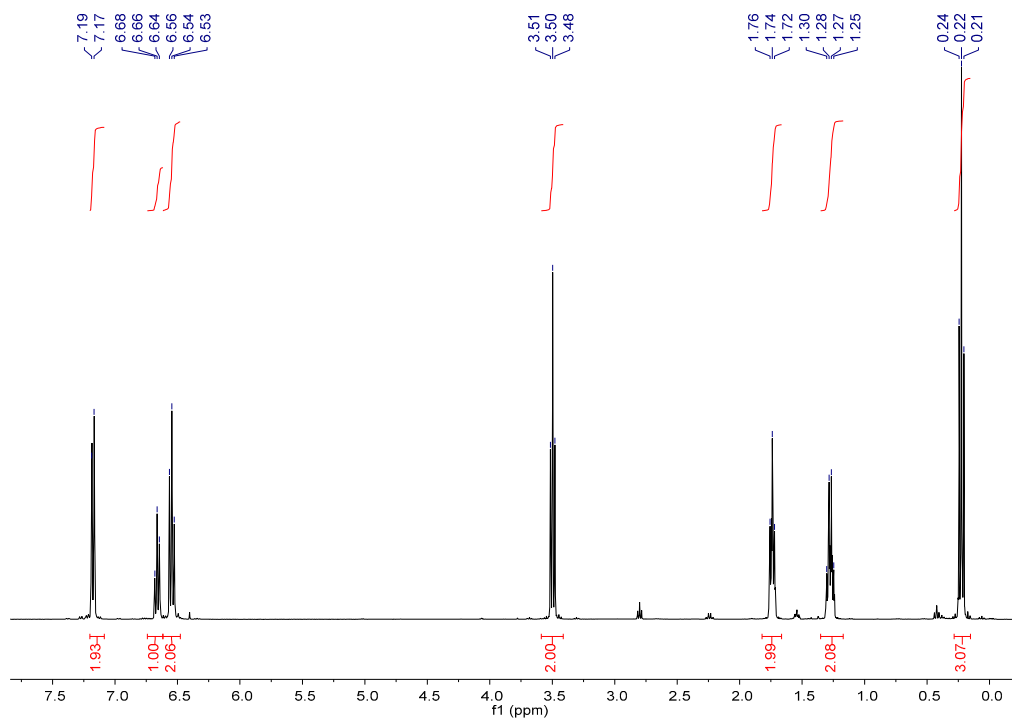


Supplementary Information

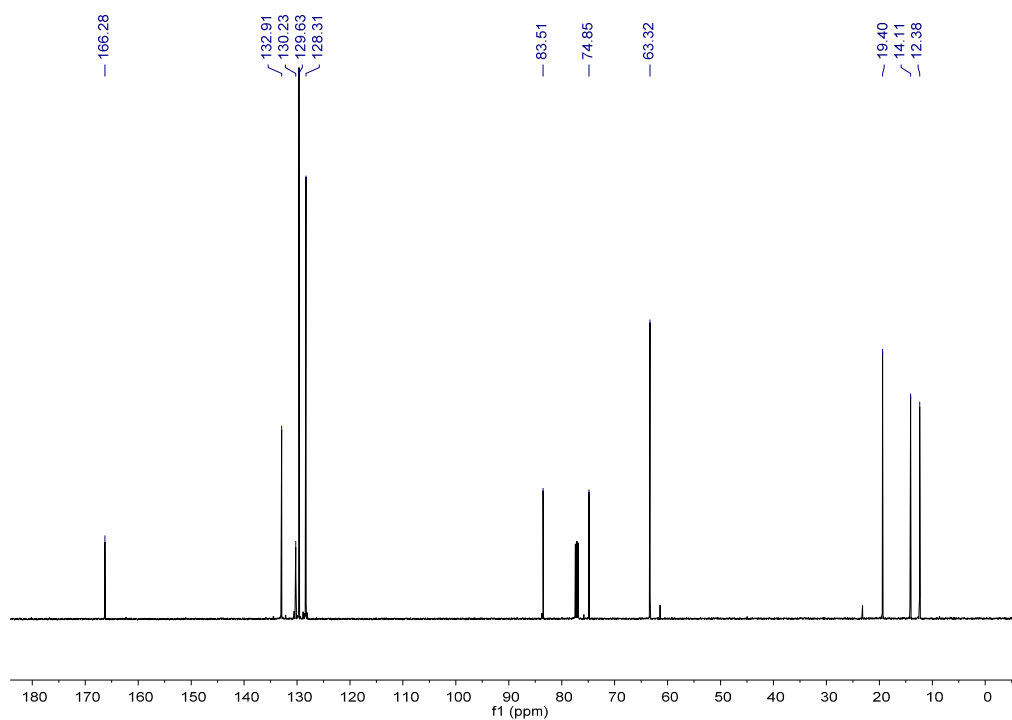
1. Experimental Selected NMR Spectra

1.1. NMR Spectra of Starting Materials

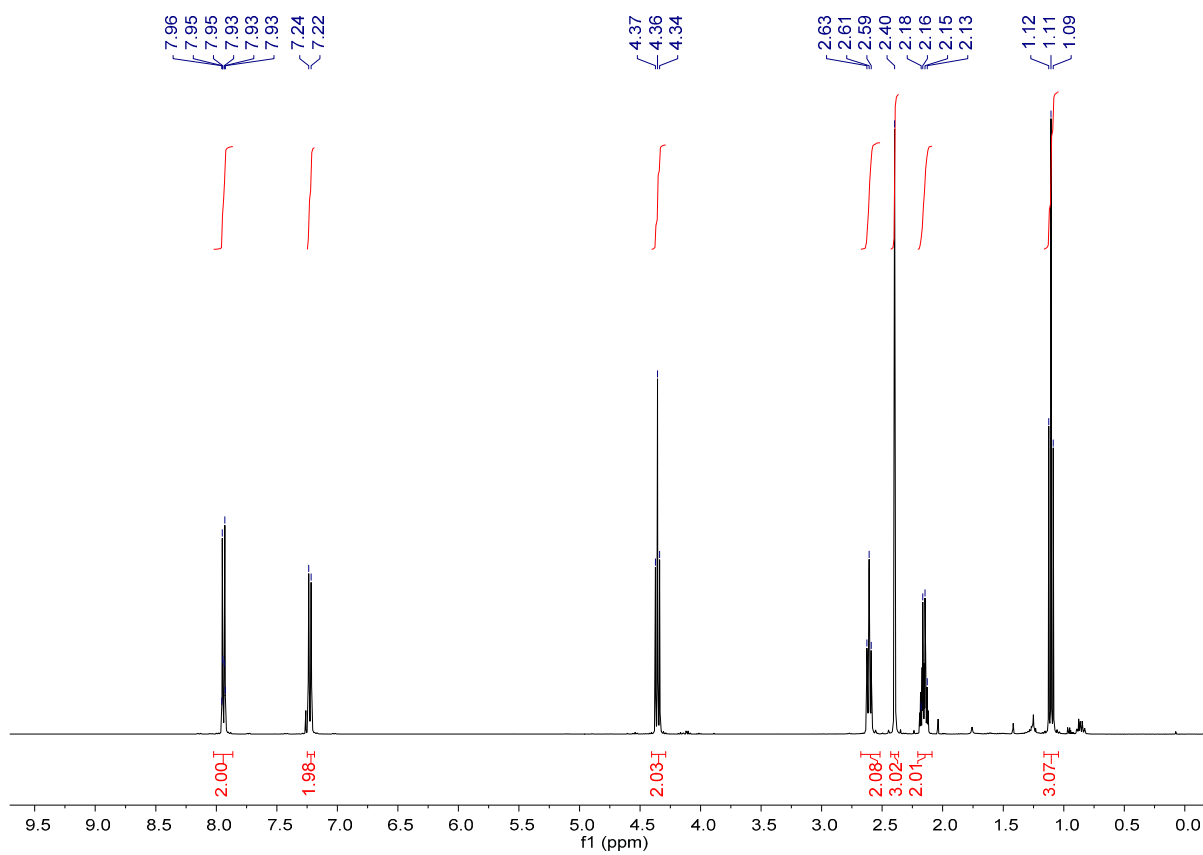
^1H -NMR (500 MHz, CDCl_3 , 298K) spectrum of hex-3-yn-1-yl benzoate (**1a**)



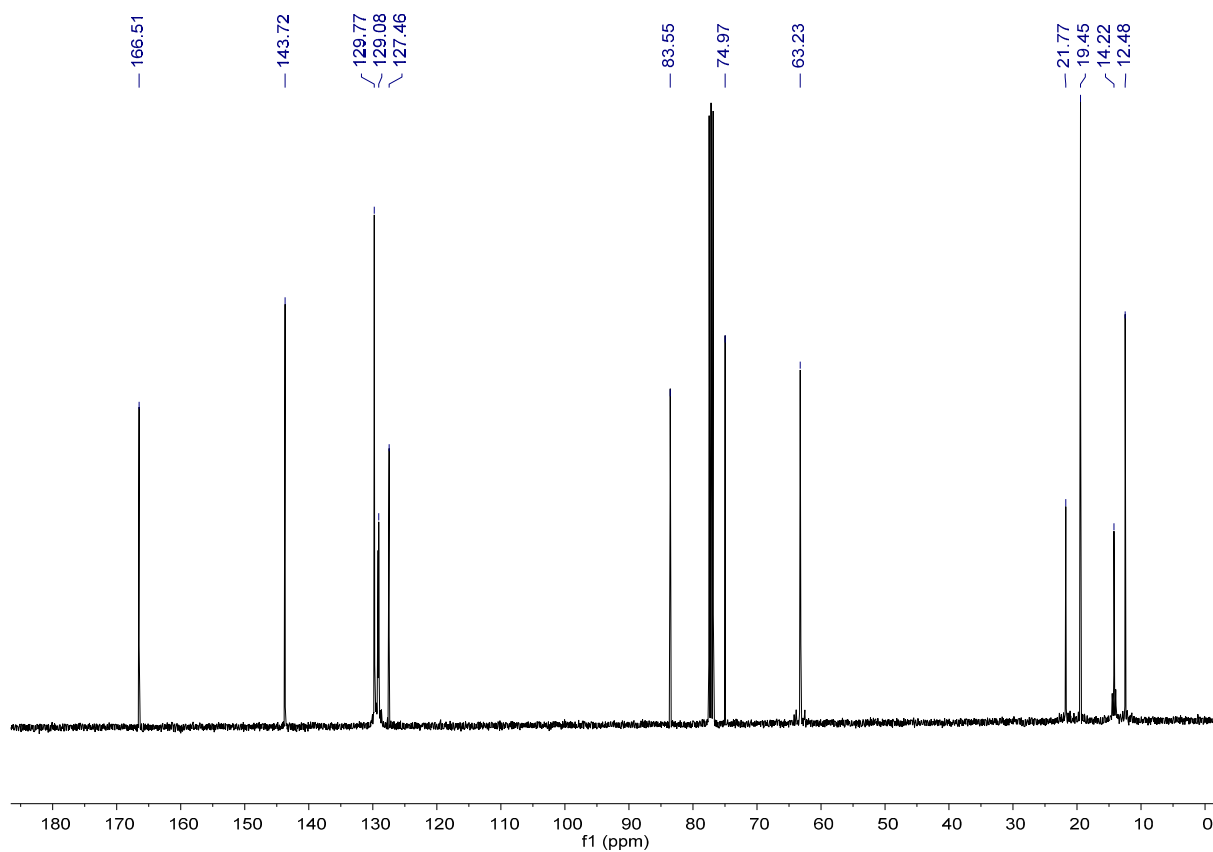
^{13}C -NMR (125 MHz, CDCl_3 , 298K) spectrum of hex-3-yn-1-yl benzoate (**1a**)



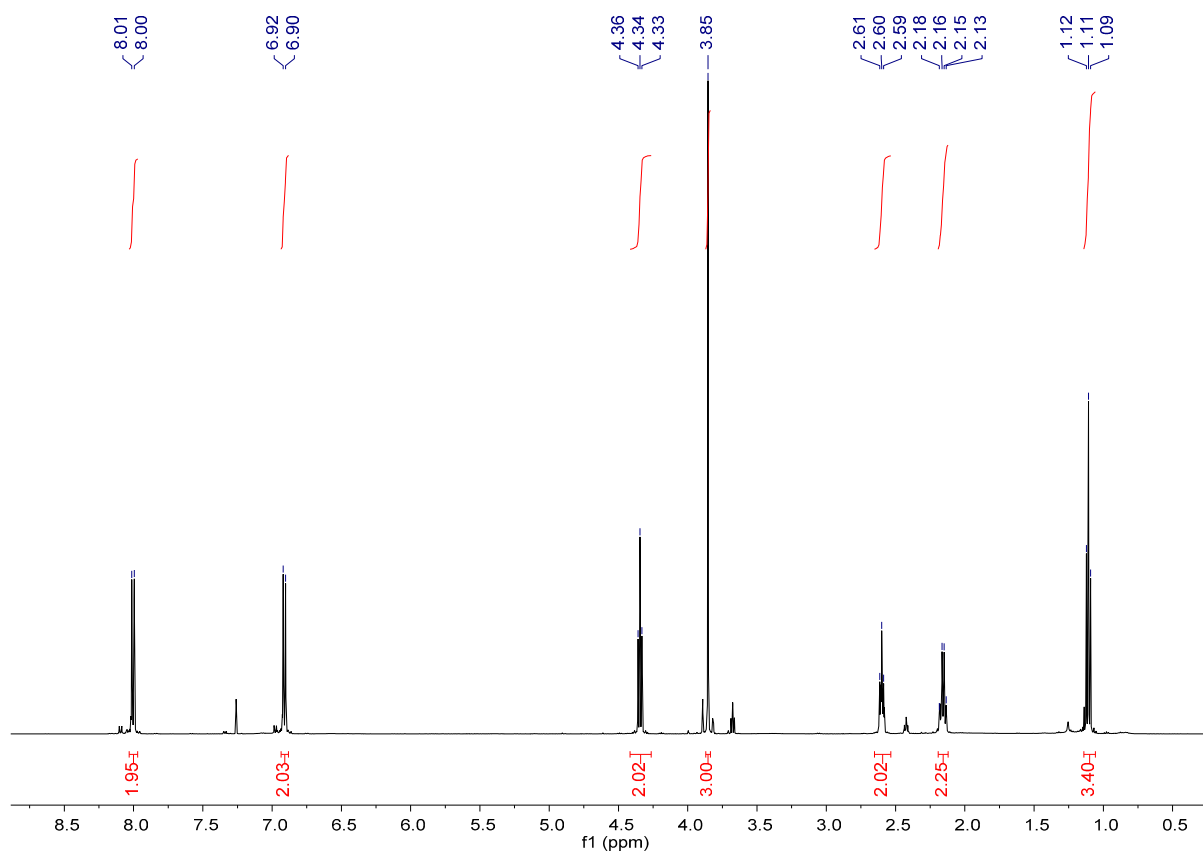
^1H -NMR (400 MHz, CDCl_3 , 298K) spectrum of hex-3-yn-1-yl 4-methylbenzoate (**1b**)



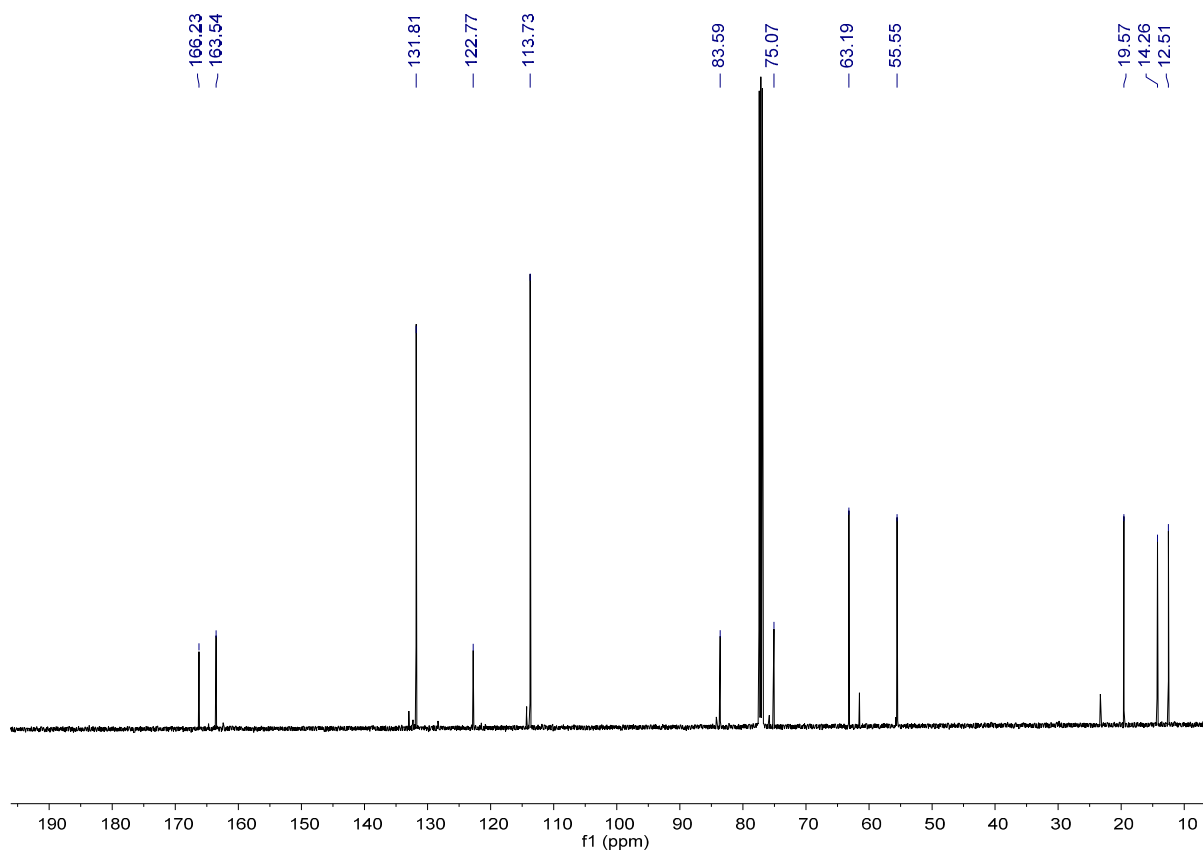
^{13}C -NMR (100.6 MHz, CDCl_3 , 298K) spectrum of hex-3-yn-1-yl 4-methylbenzoate (**1b**)



^1H -NMR (500 MHz, CDCl_3 , 298K) spectrum of hex-3-yn-1-yl 4-methoxybenzoate (**1c**)

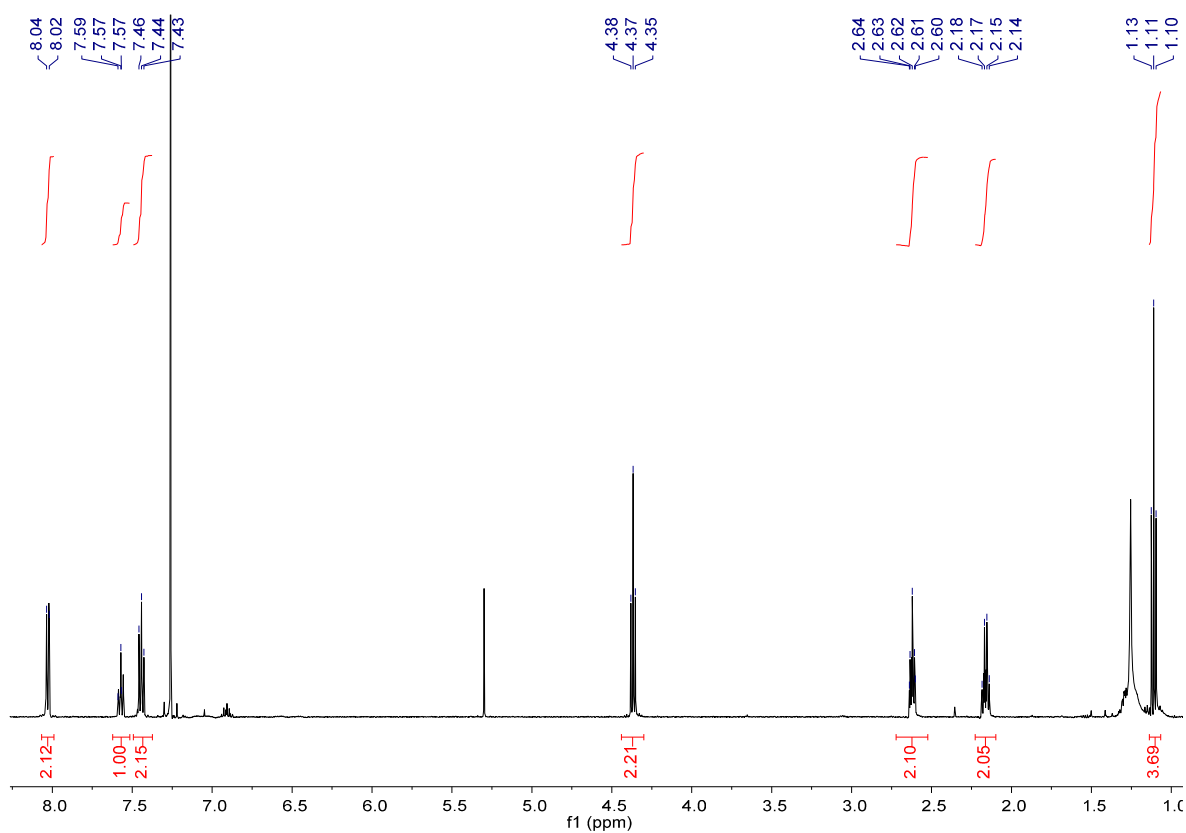


^{13}C -NMR (125 MHz, CDCl_3 , 298K) spectrum of hex-3-yn-1-yl 4-methoxybenzoate (**1c**)

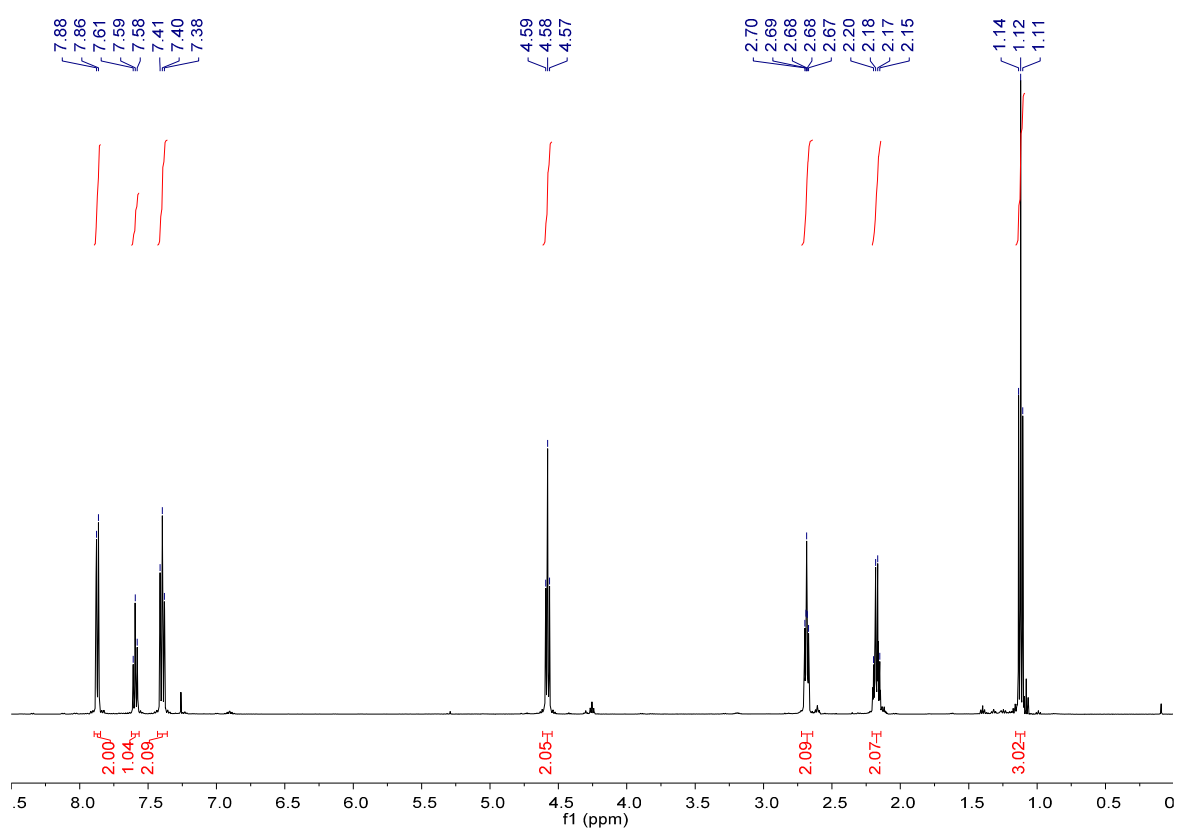


1.2. NMR Spectra of Products

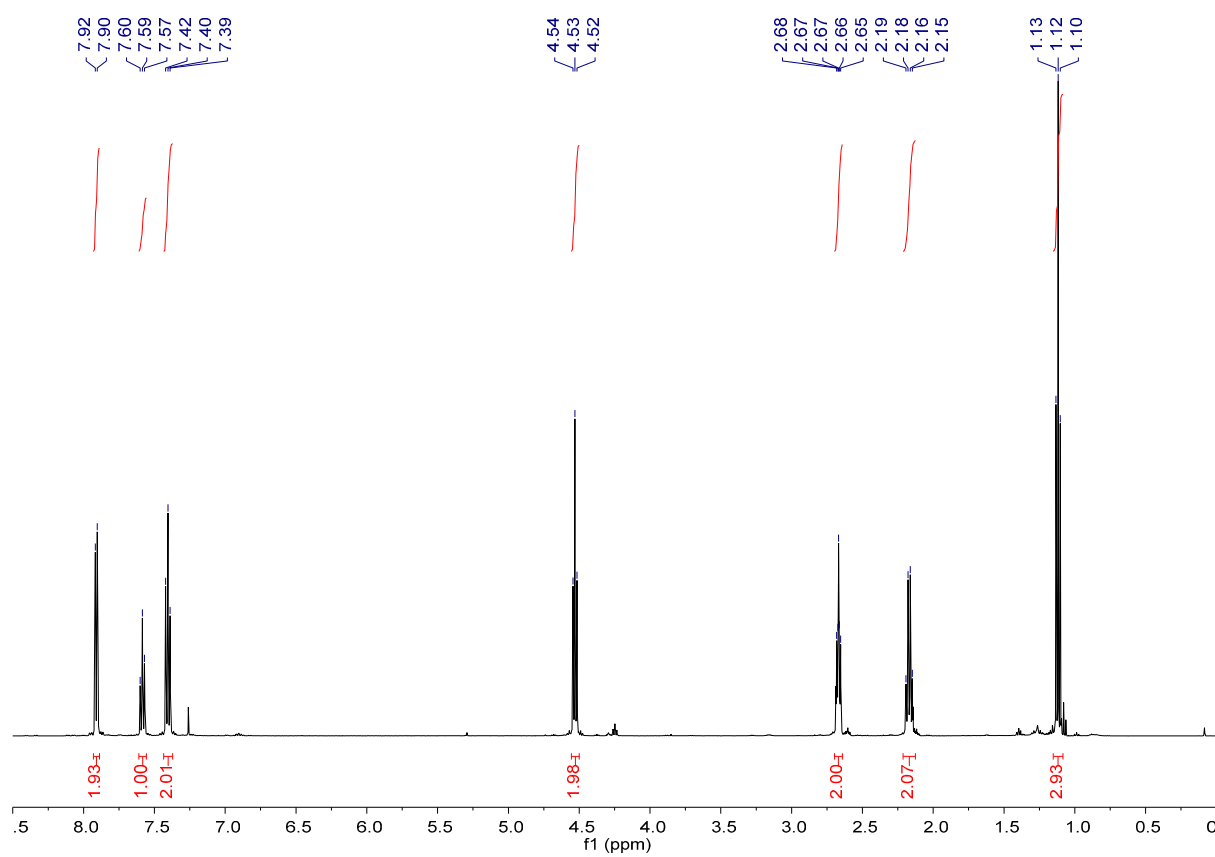
^1H -NMR (500 MHz, CDCl_3 , 298K) spectrum of **2a** crystals.



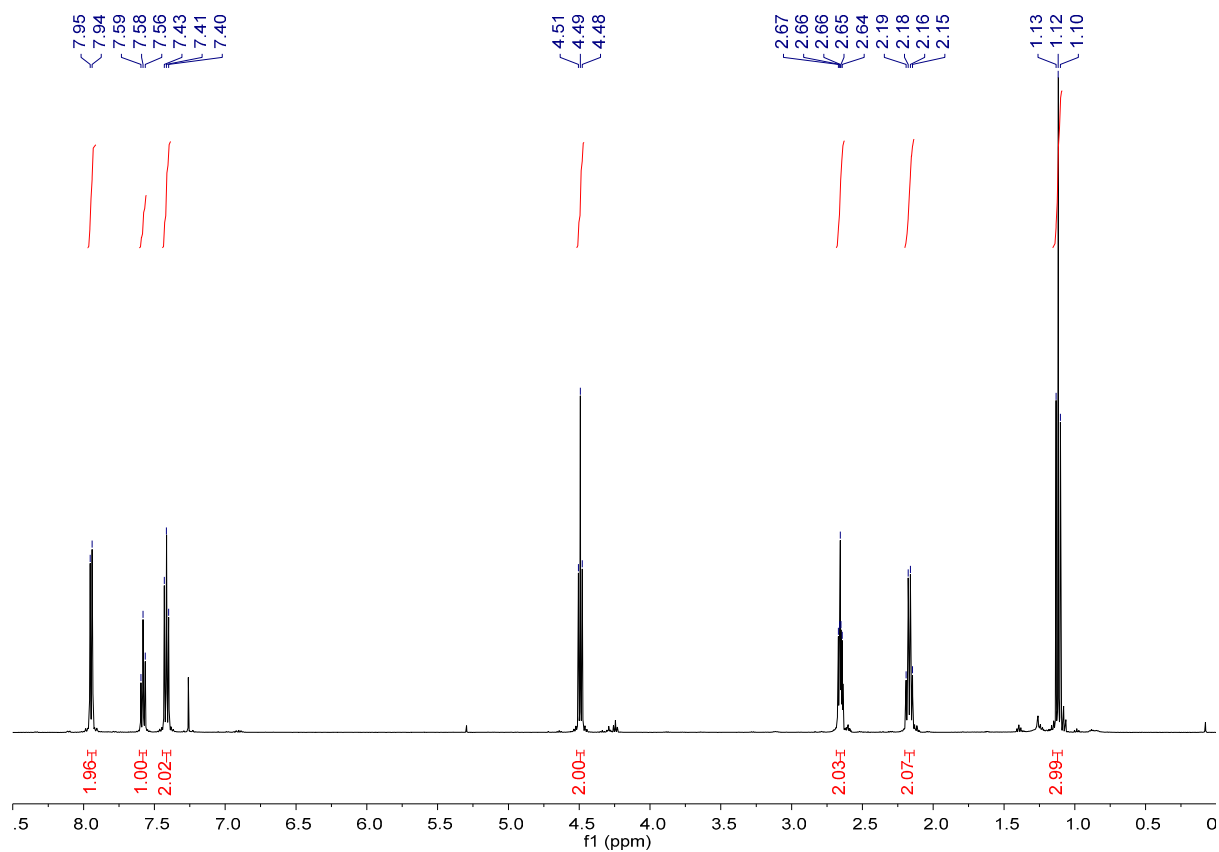
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.4 M) spectrum of **2a**.



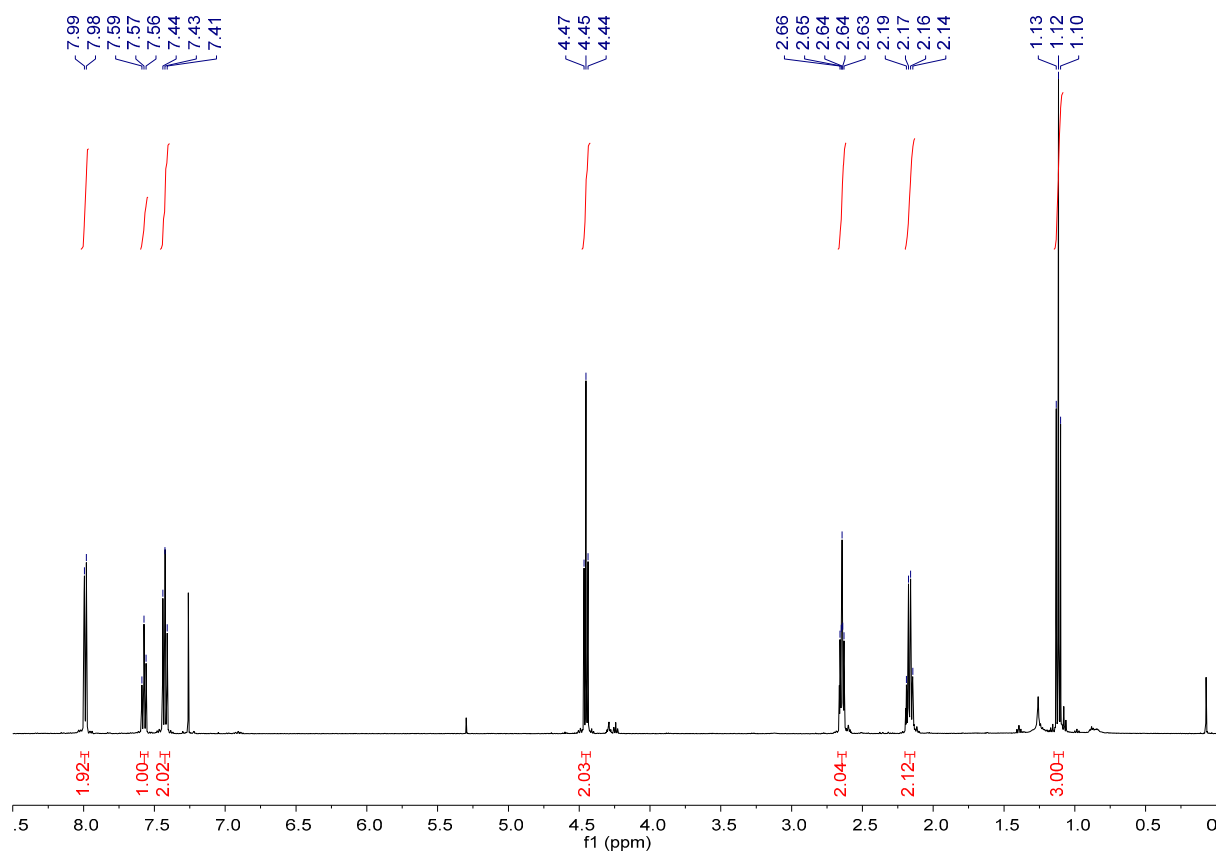
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.2 M) spectrum of **2a**.



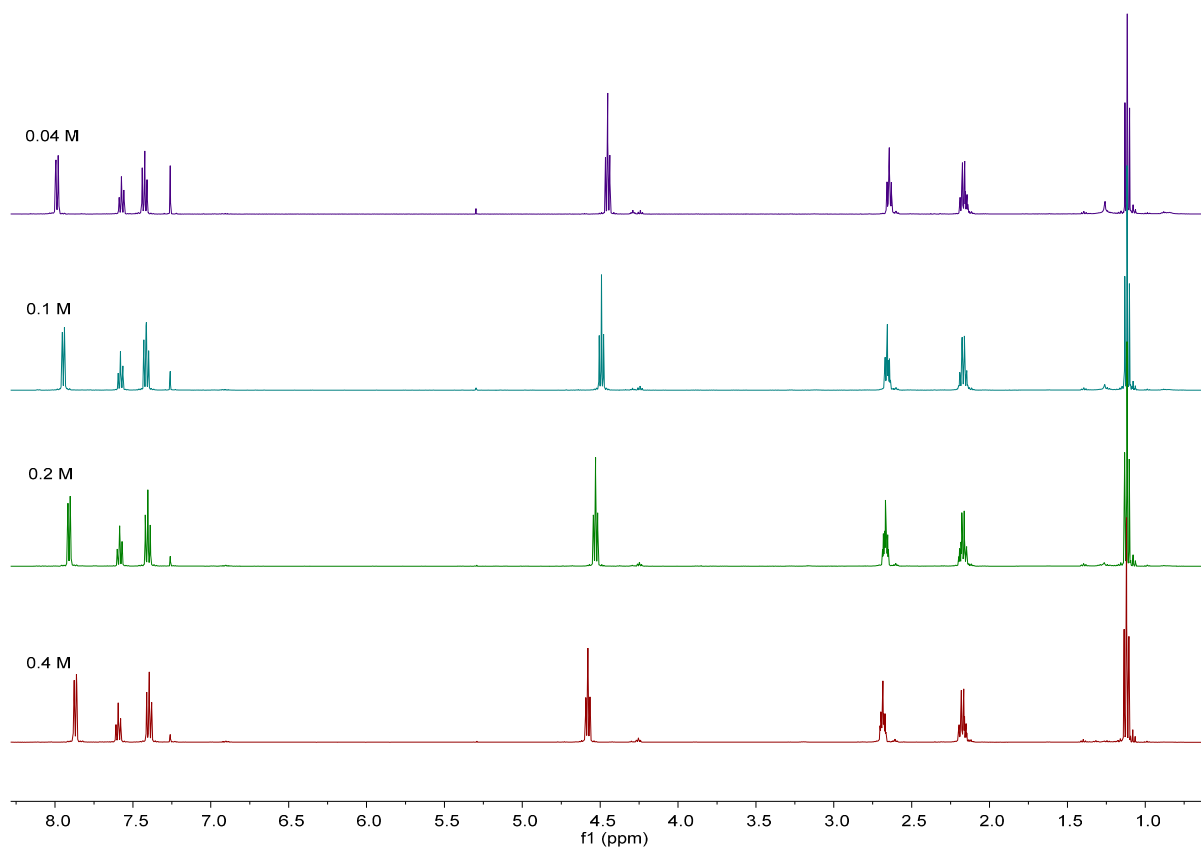
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.1 M) spectrum of **2a**.



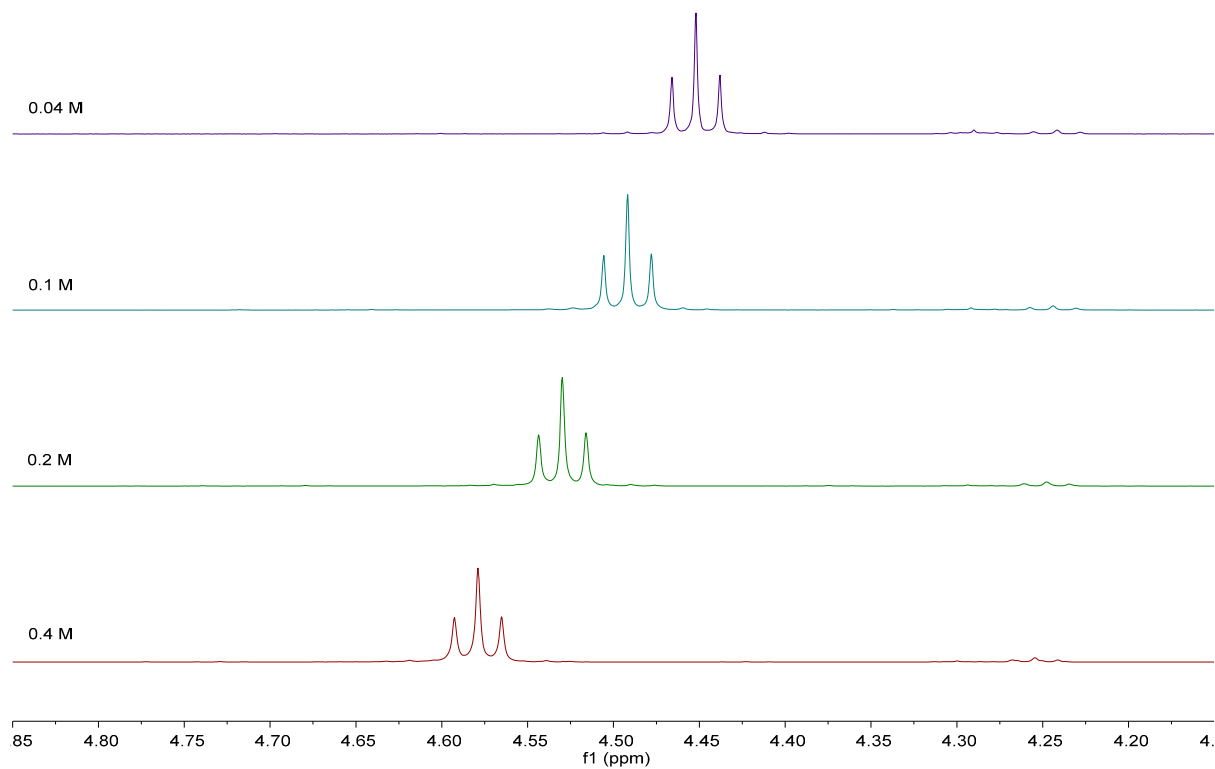
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.04 M) spectrum of **2a**.



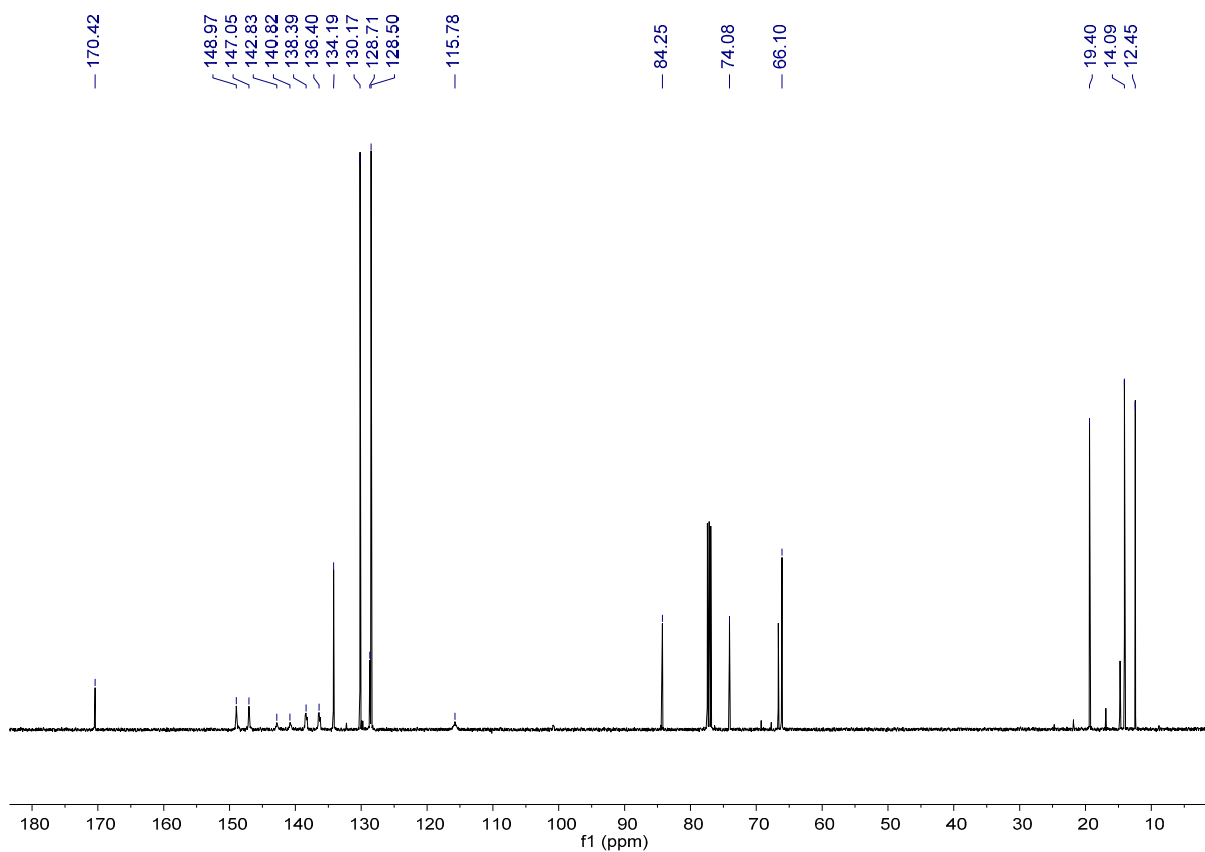
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K) spectra of **2a** across concentrations 0.04–0.4 M.



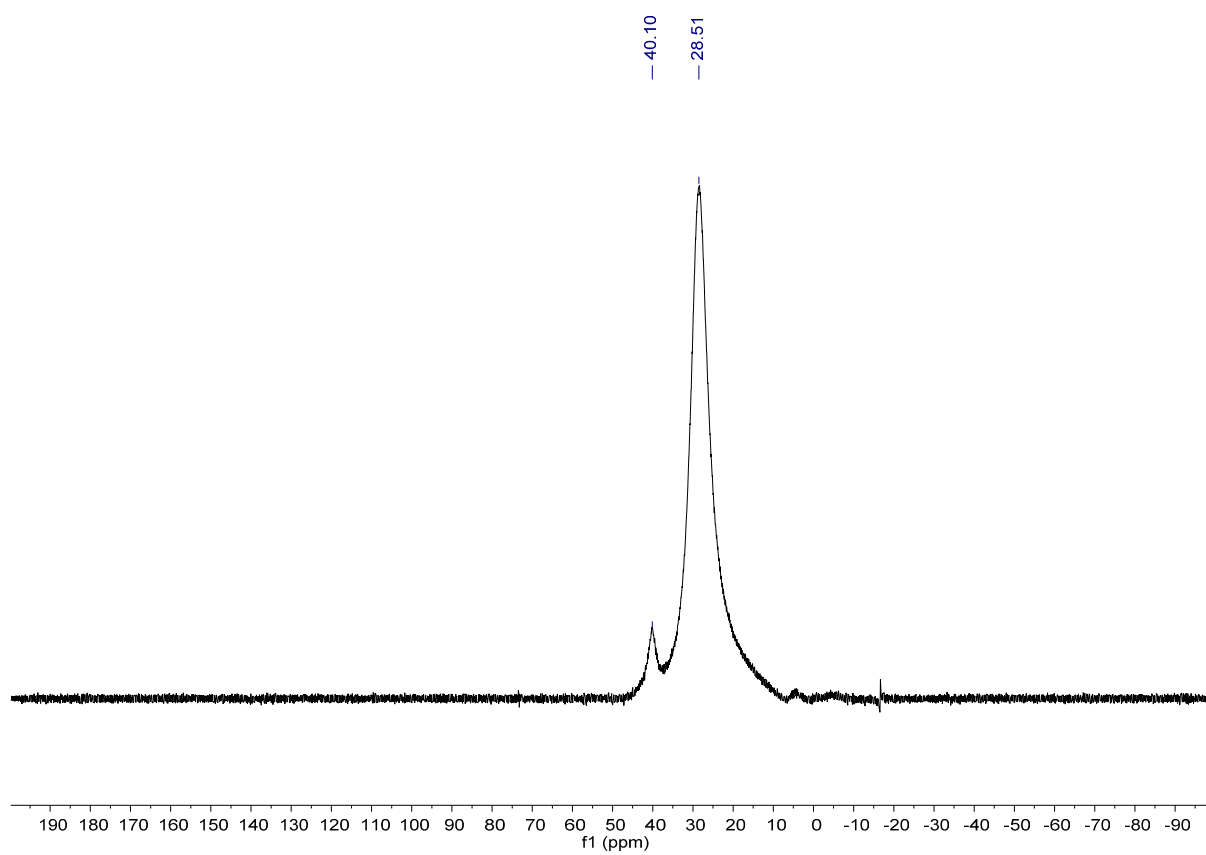
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K) spectra of **2a**, expansion of $\text{CH}_2\text{O}(\text{CO})^-$ across concentrations 0.04–0.4 M.



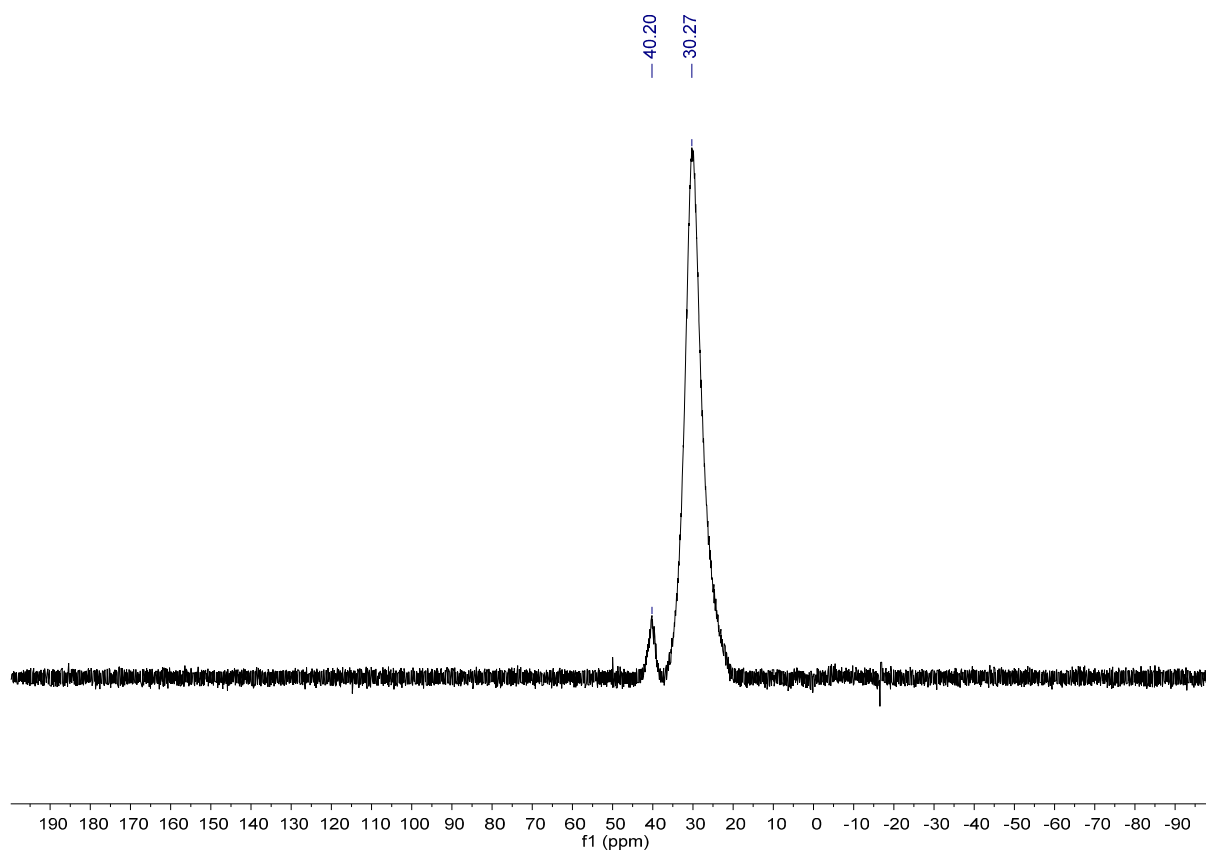
In situ ^{13}C -NMR (125 MHz, CDCl_3 , 298K, 0.2 M) spectrum of **2a**.



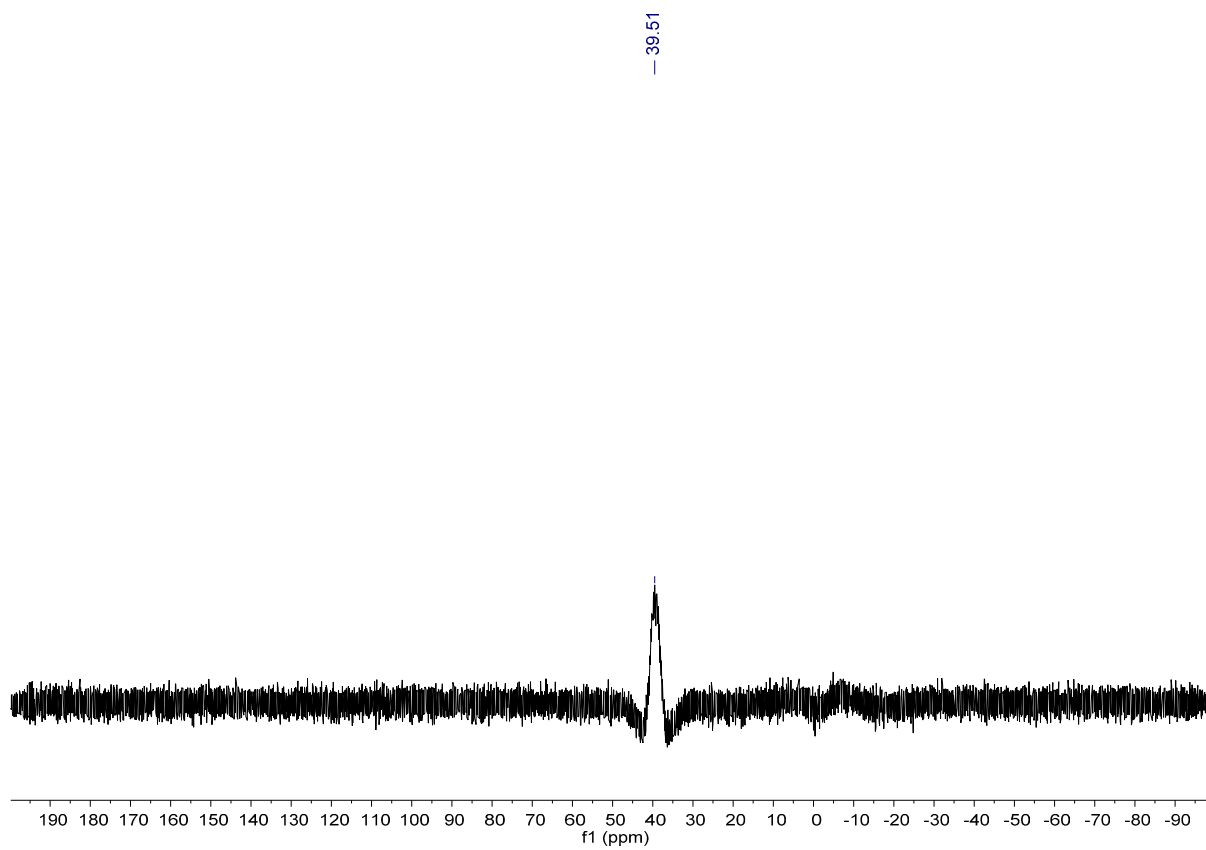
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.4 M) spectrum of **2a**.



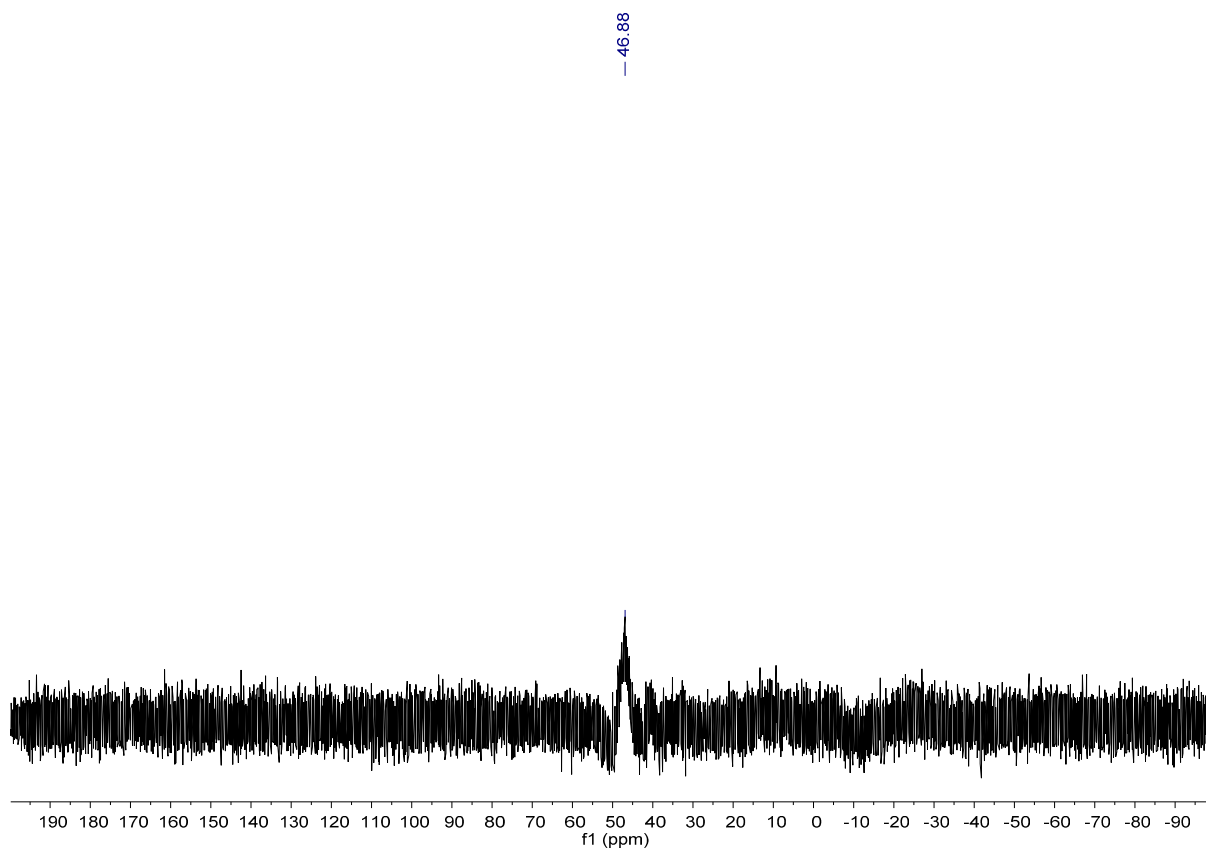
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.2 M) spectrum of **2a**.



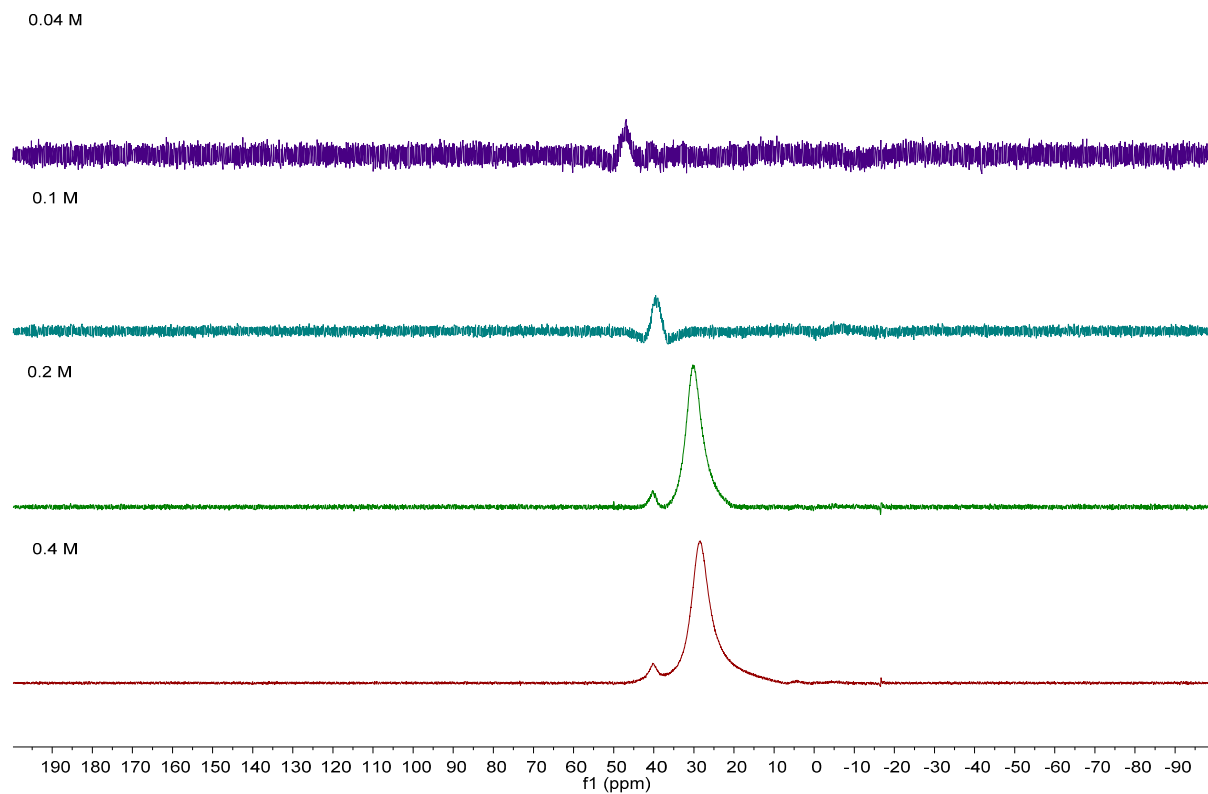
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.1 M) spectrum of **2a**.



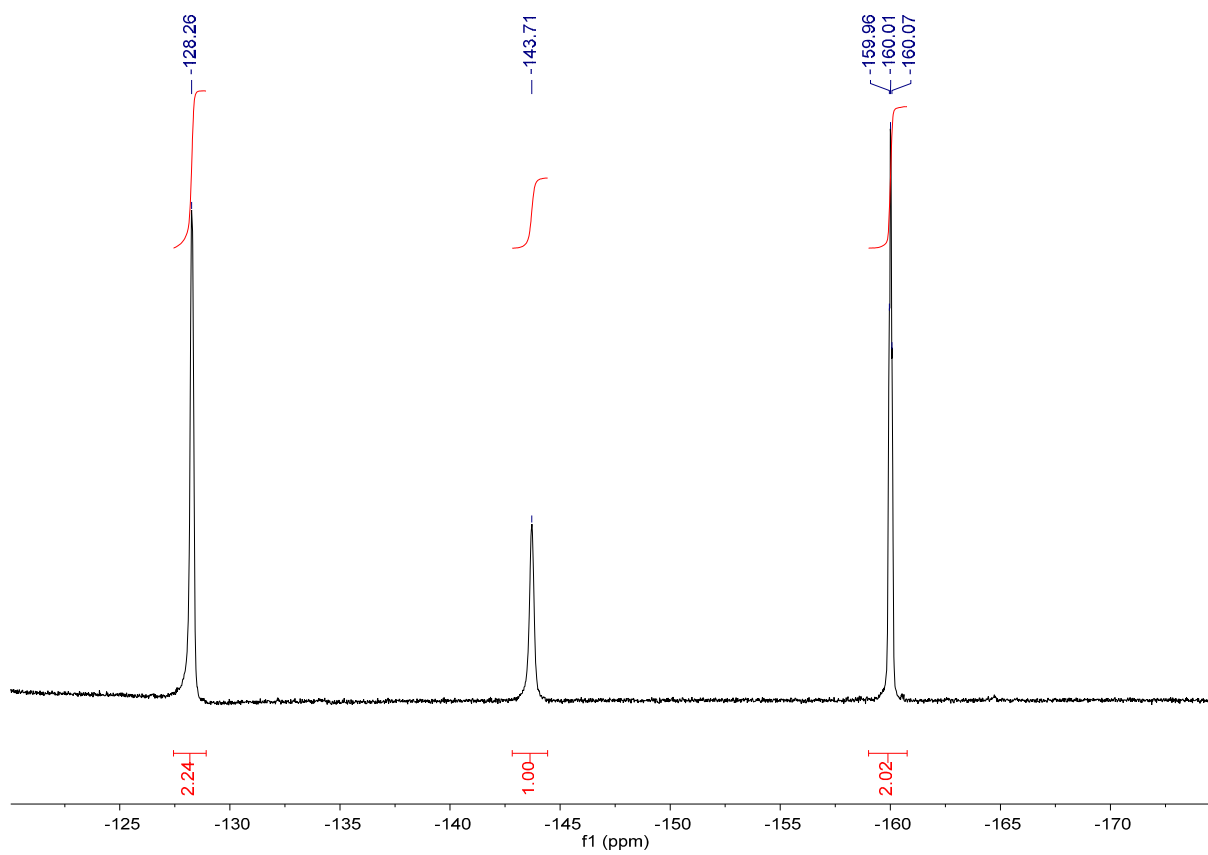
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.04 M) spectrum of **2a**.



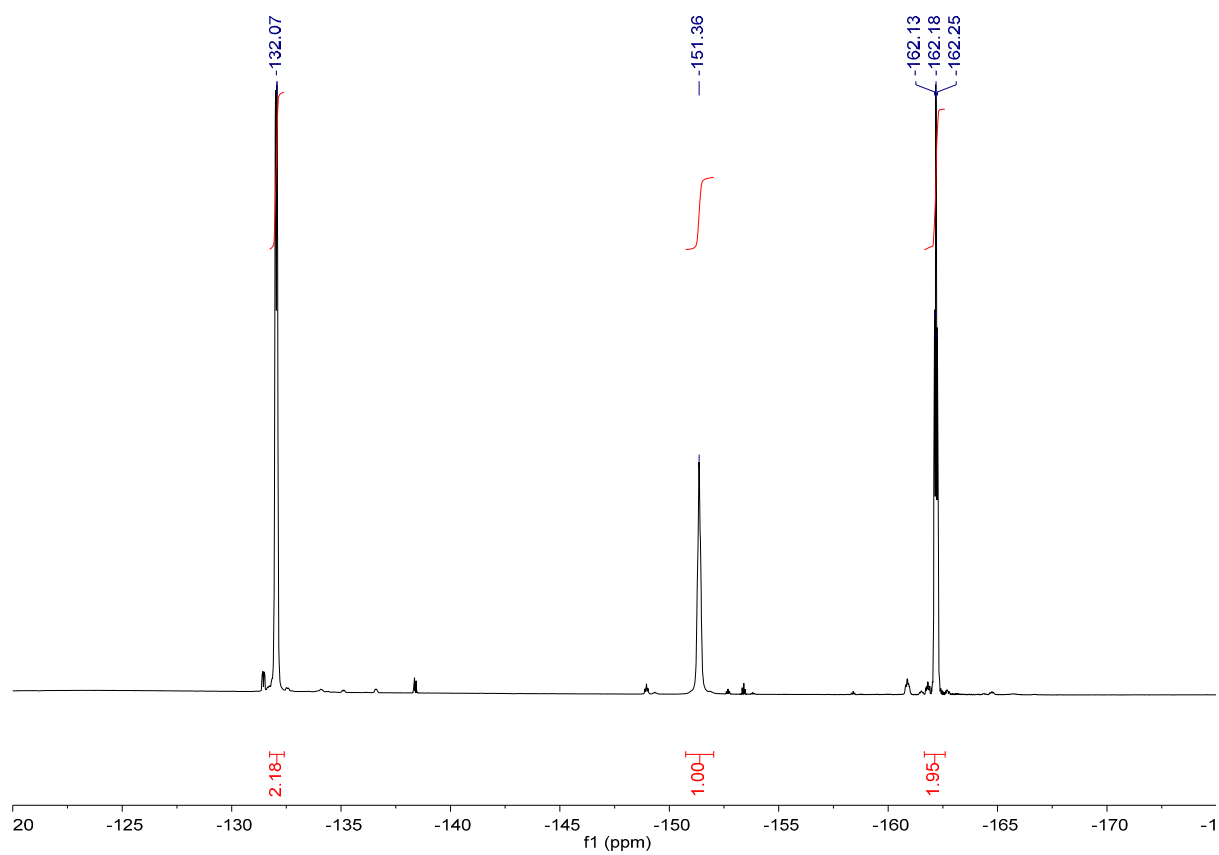
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K) spectra of **2a** across concentrations 0.04–0.4 M.



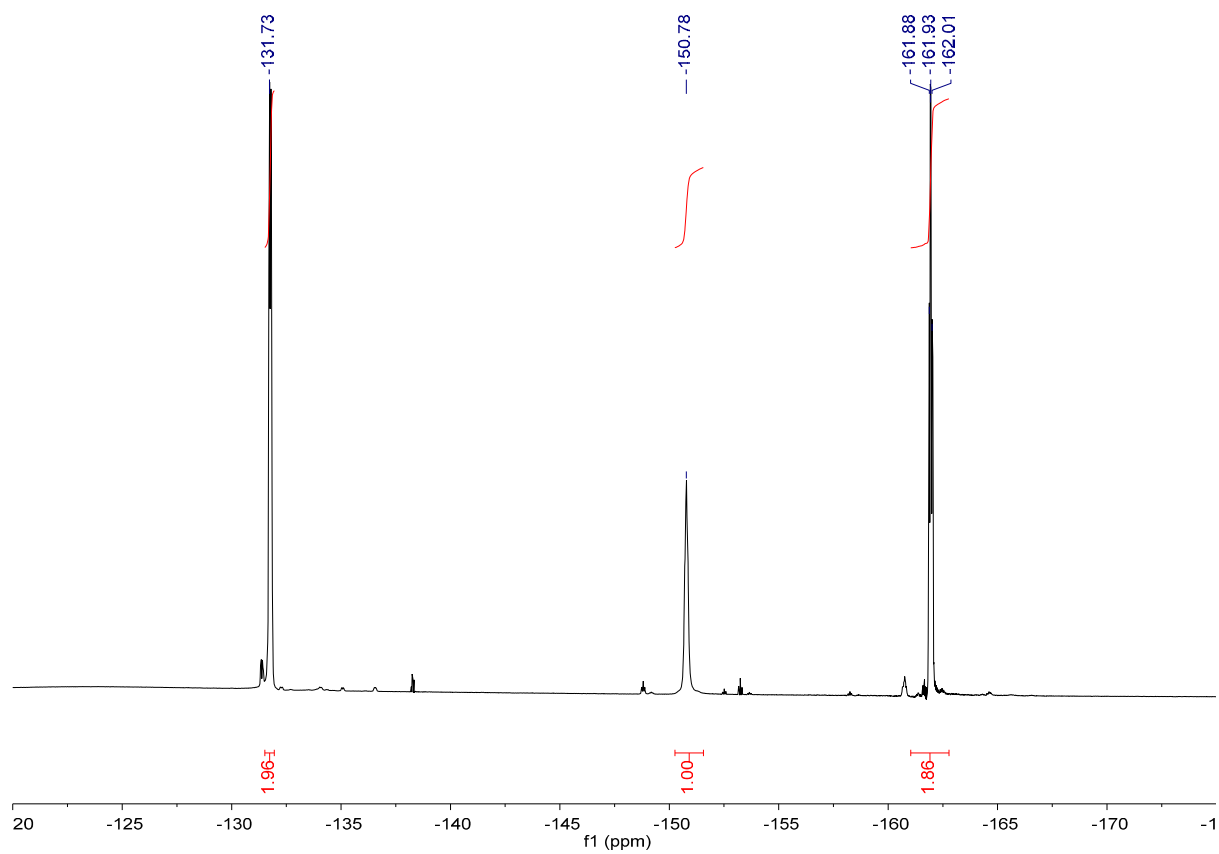
^{19}F -NMR (283 MHz, CDCl_3 , 298 K) spectrum of **2a** crystals.



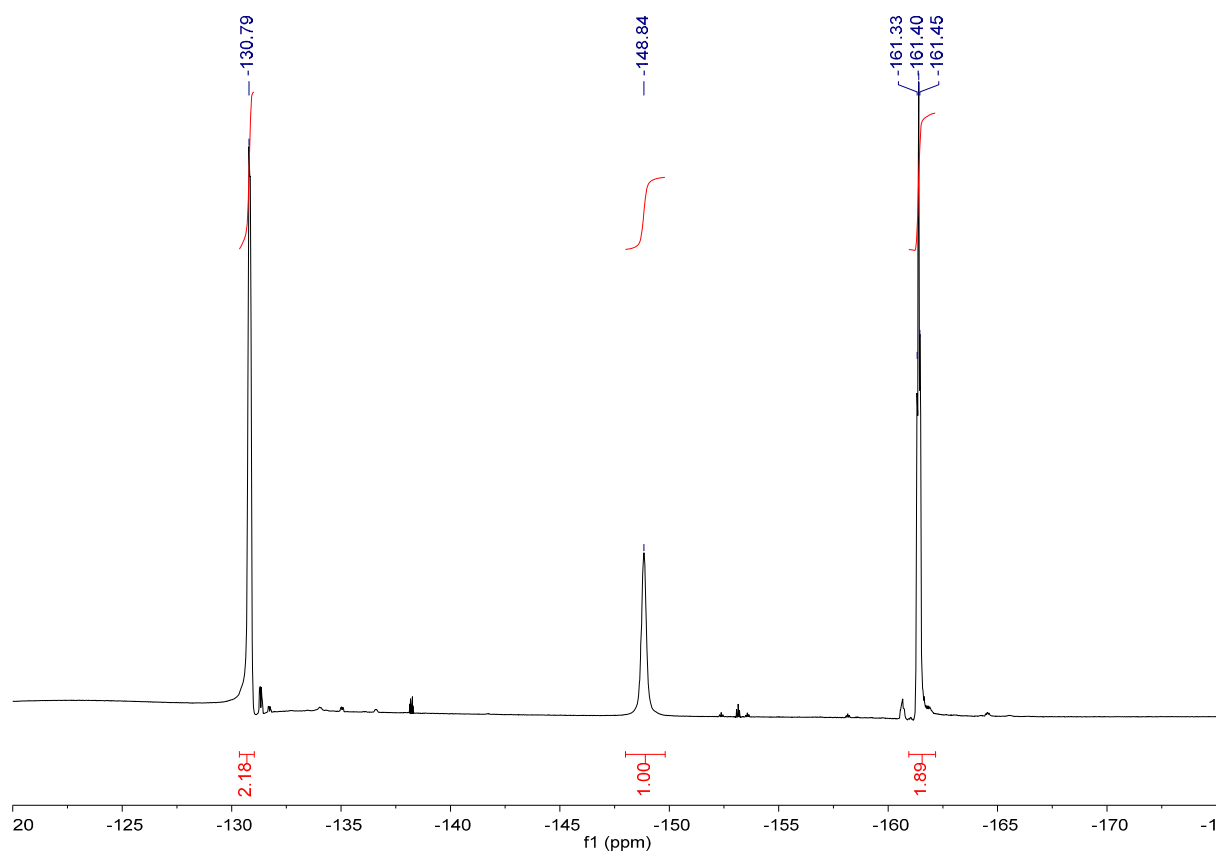
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.4 M) spectrum of **2a**.



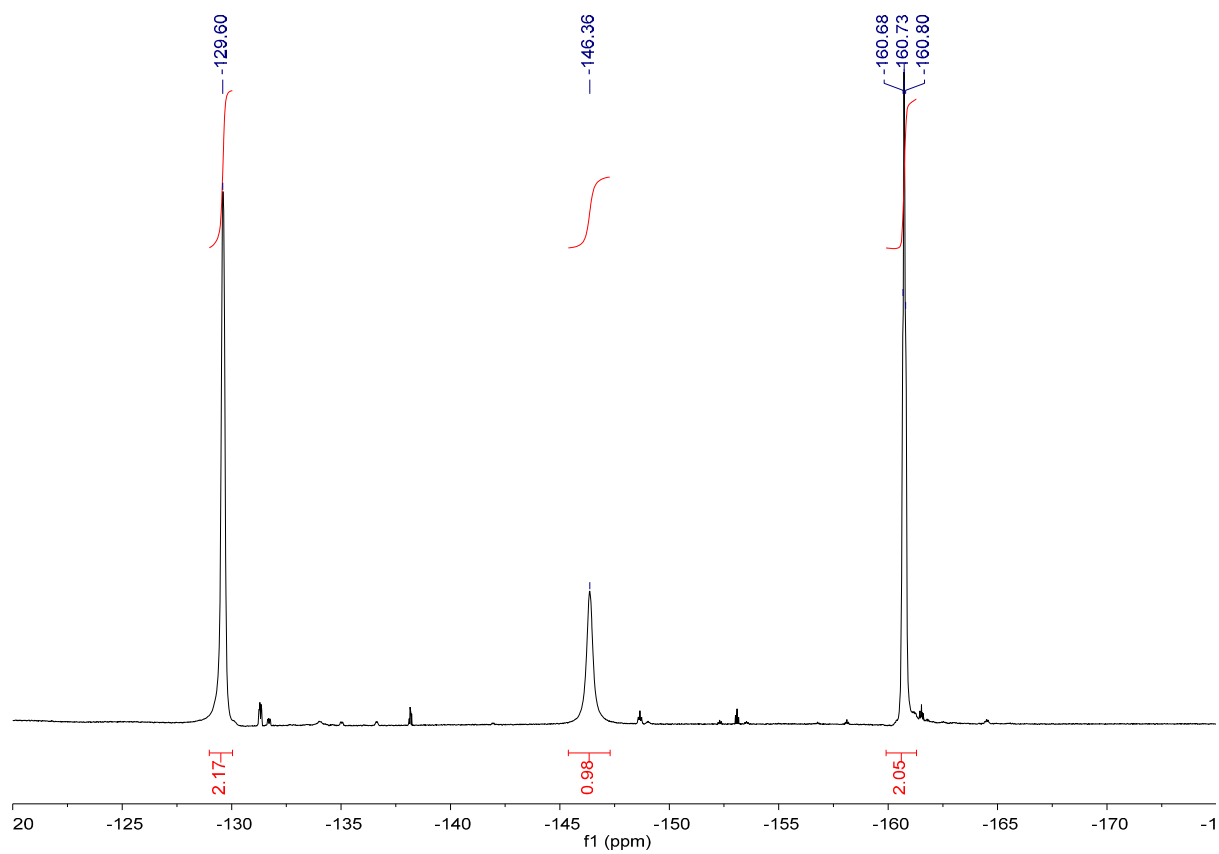
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.2 M) spectrum of **2a**.



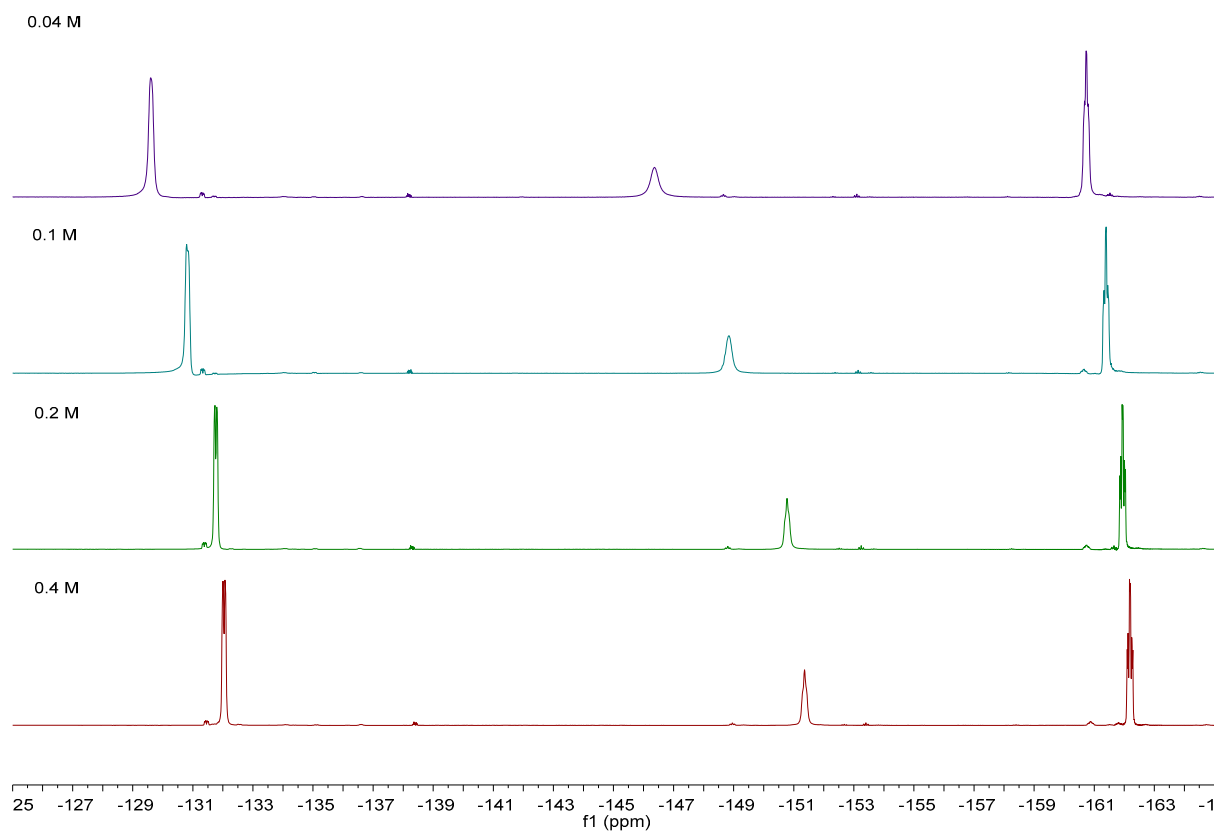
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.1 M) spectrum of **2a**.



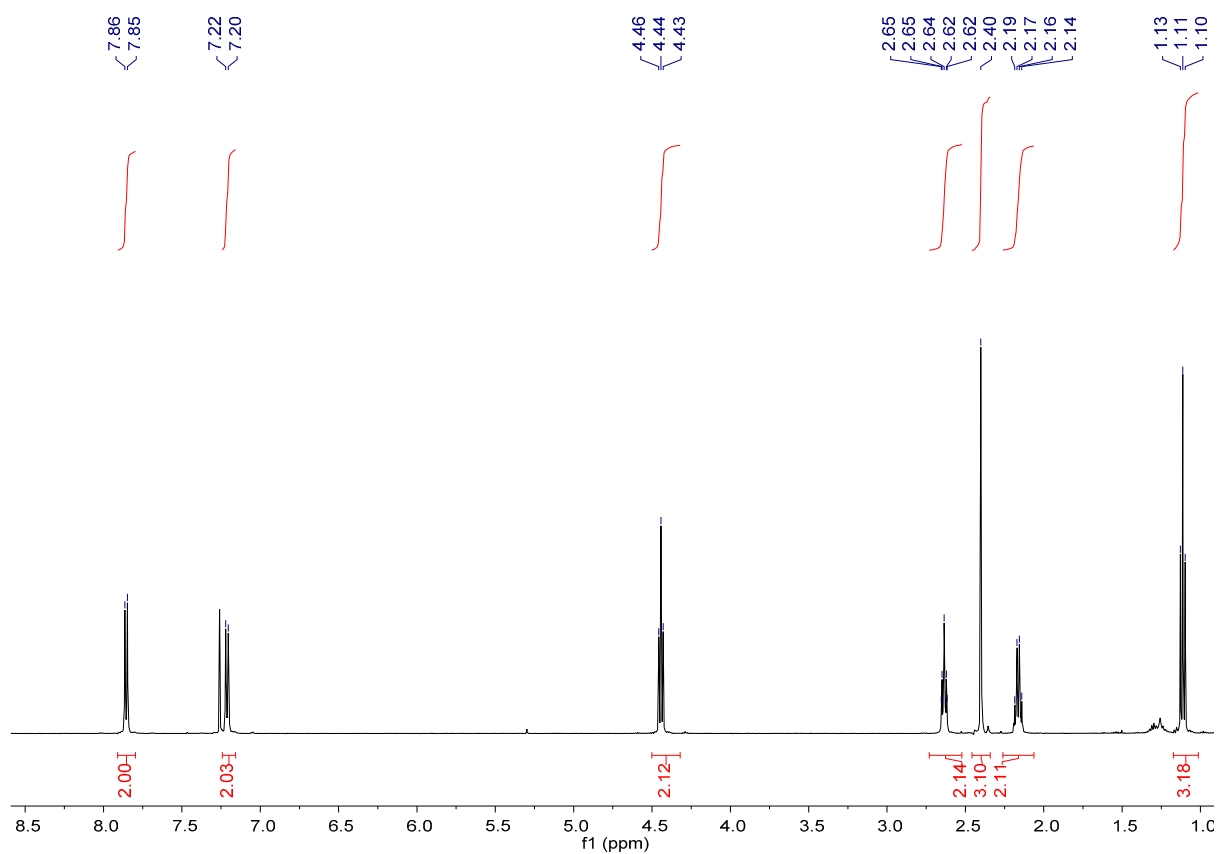
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.04 M) spectrum of **2a**.



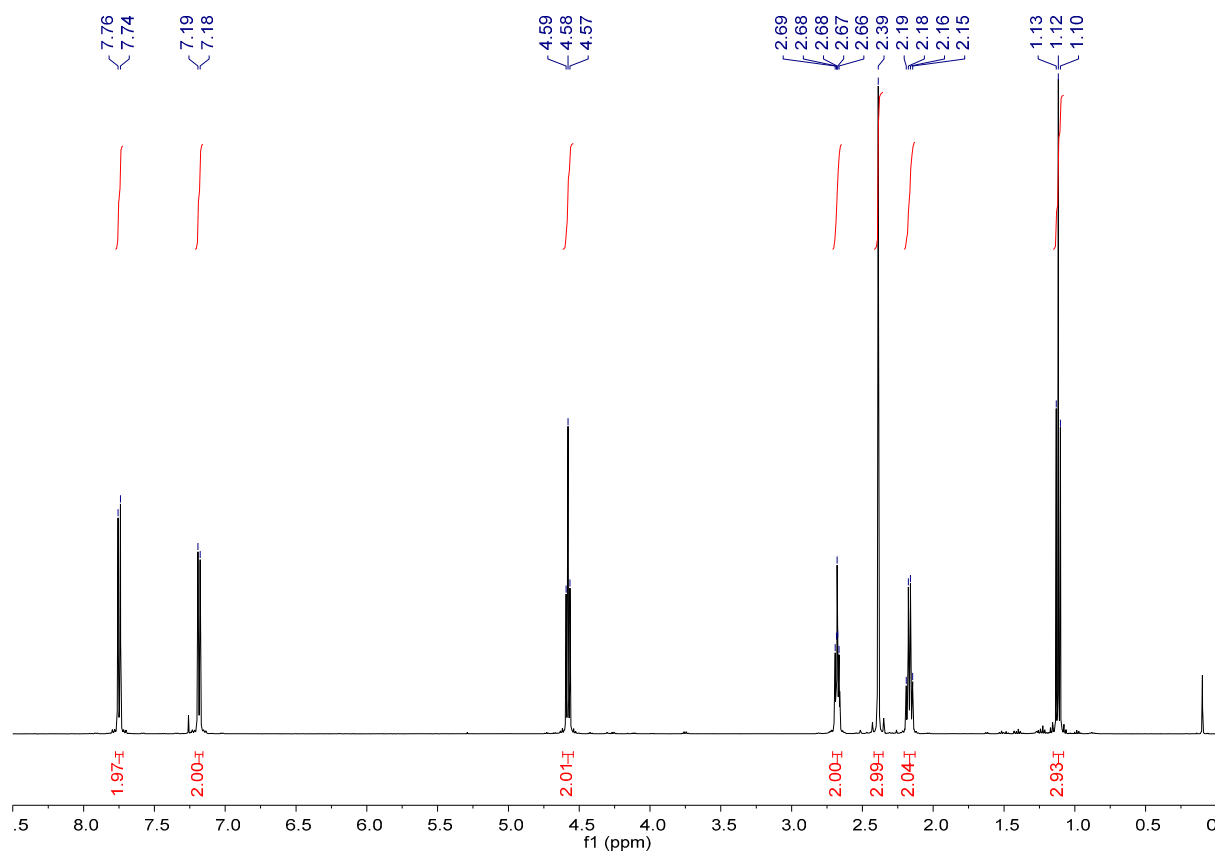
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K) spectra of **2a** across concentrations 0.04–0.4 M



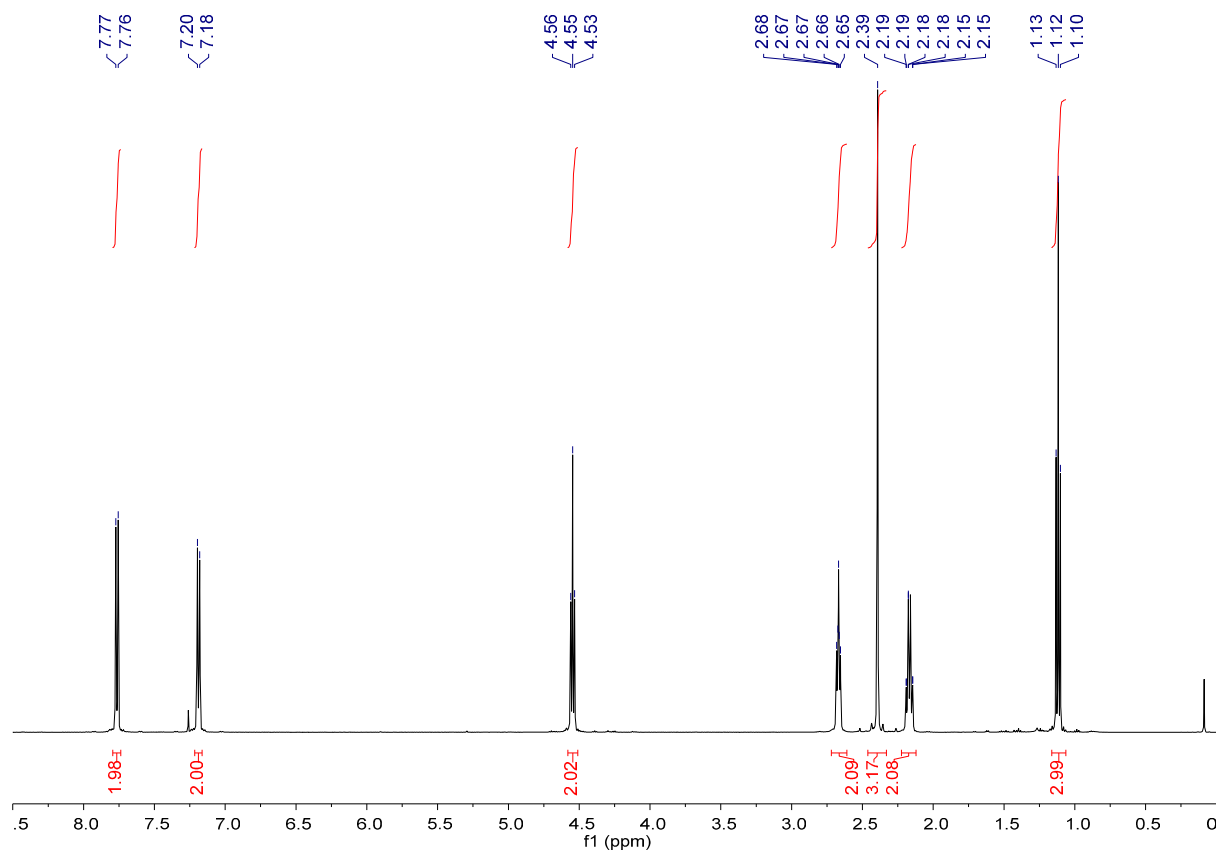
^1H -NMR (500 MHz, CDCl_3 , 298K) spectrum of **2b** crystals.



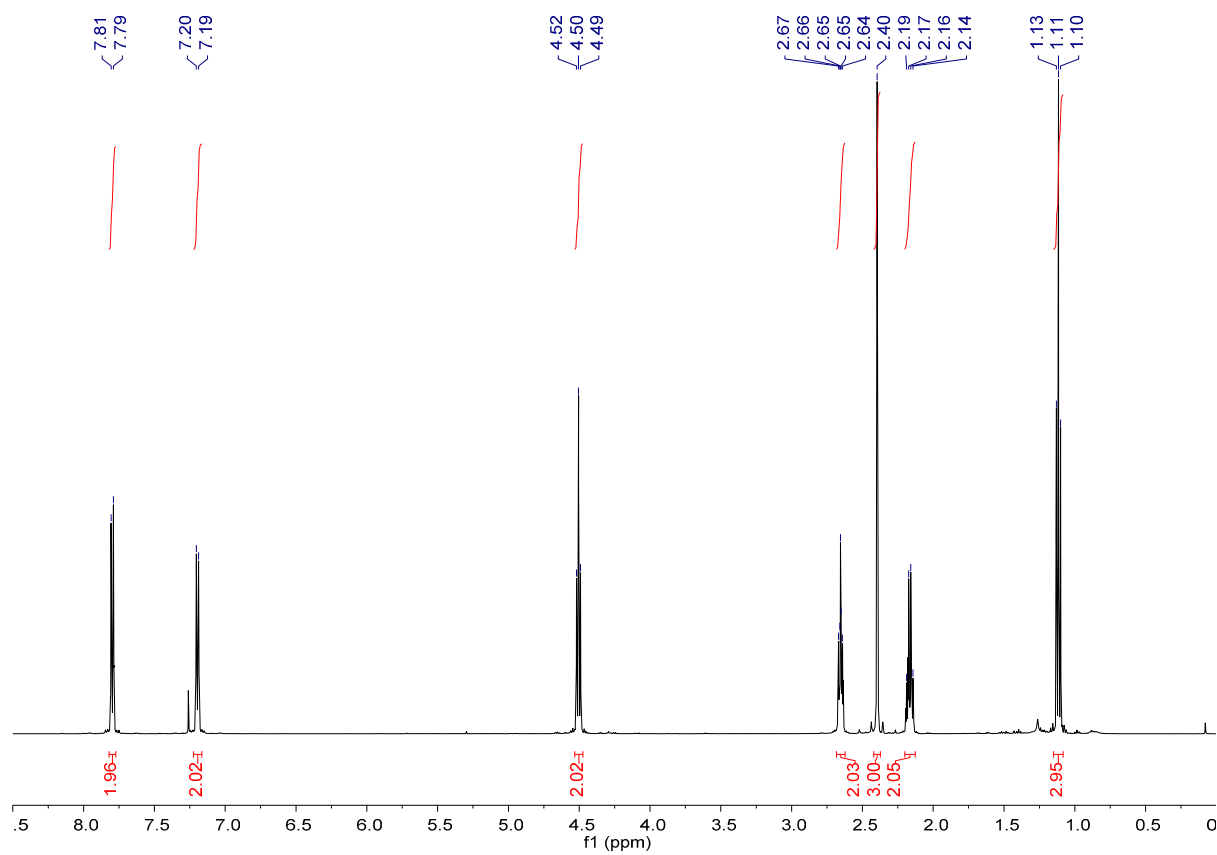
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.4 M) spectrum of **2b**.



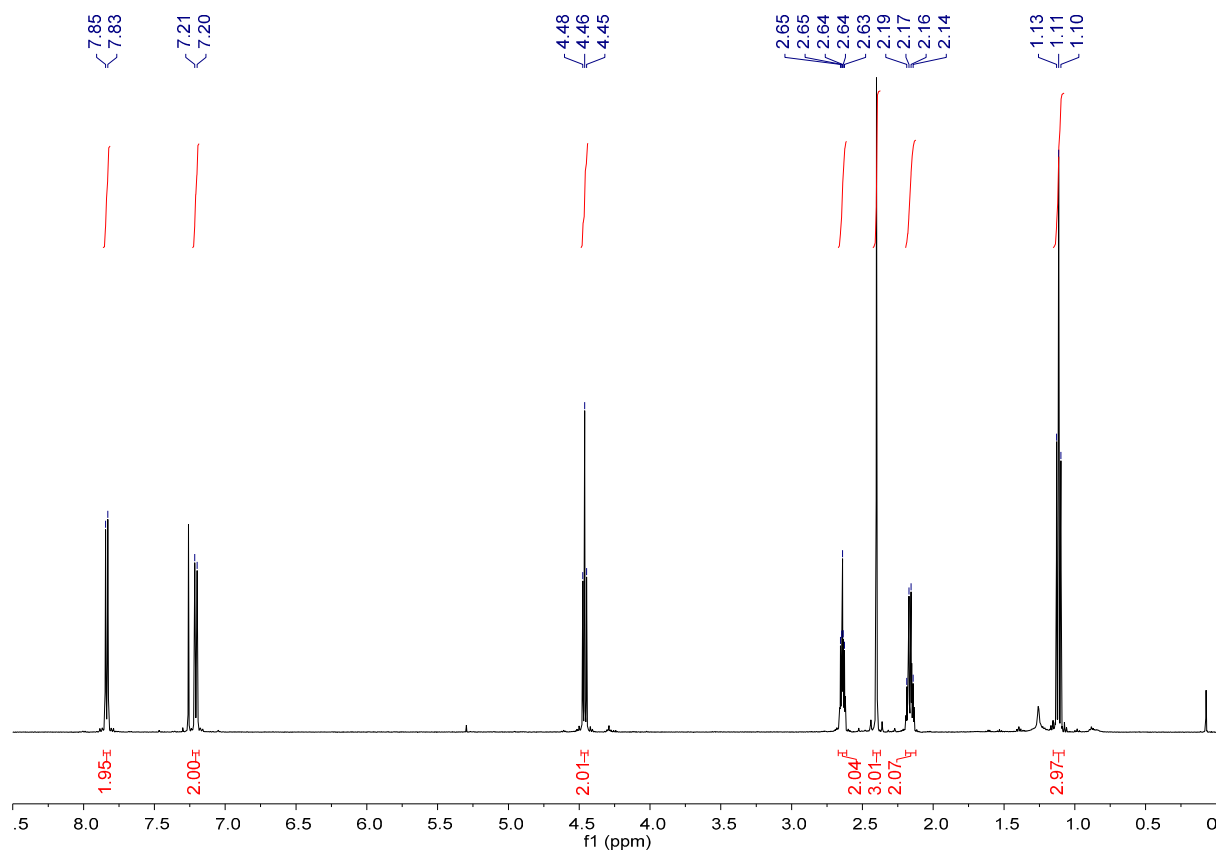
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.2 M) spectrum of **2b**.



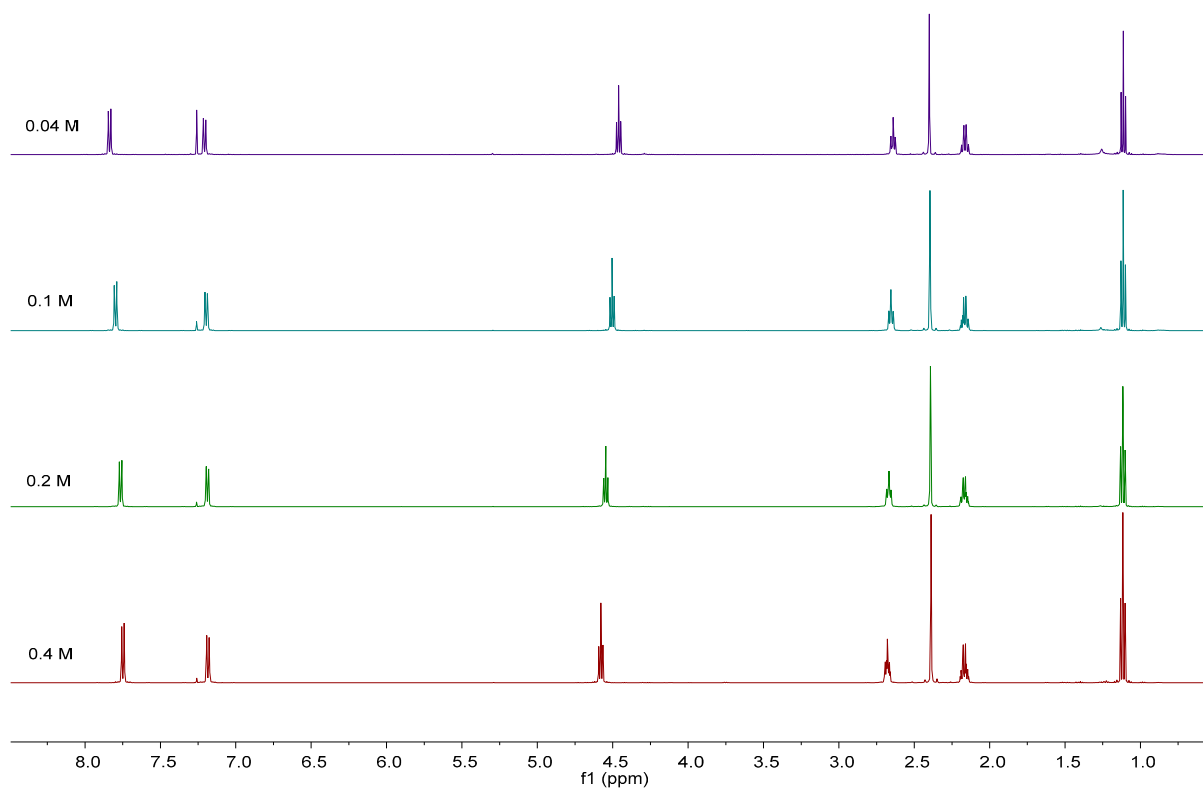
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.1 M) spectrum of **2b**.



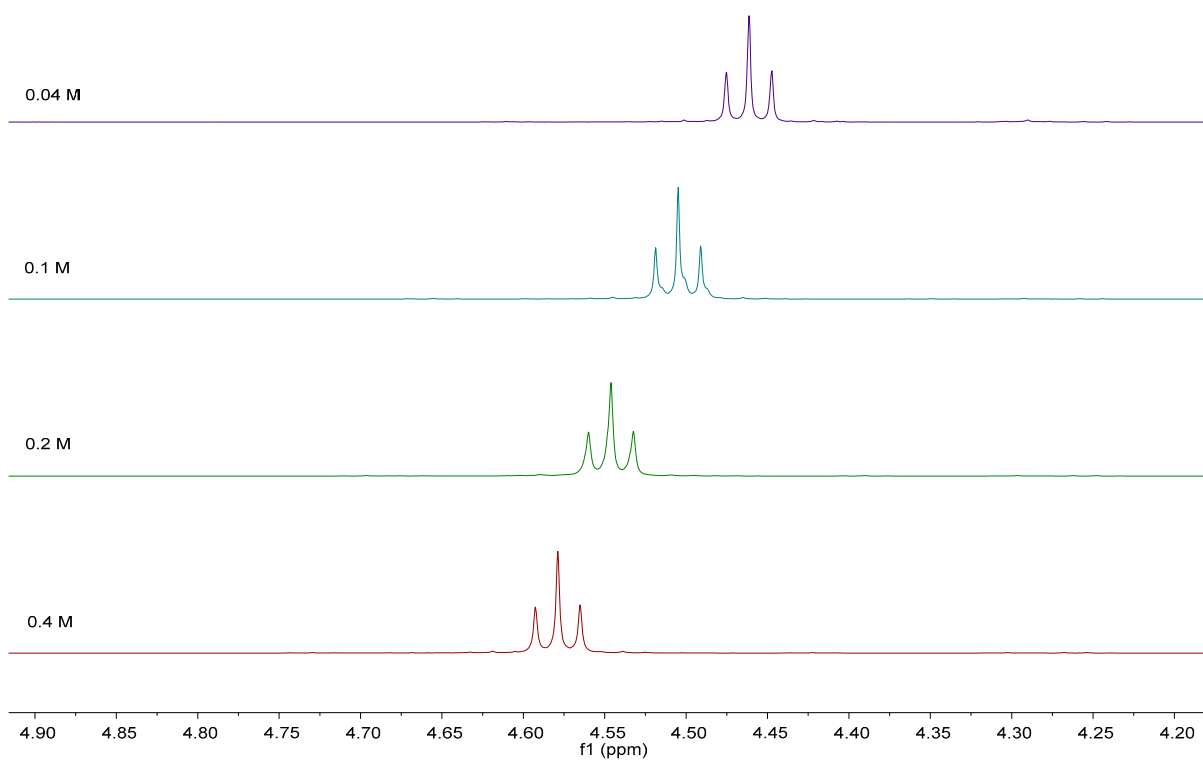
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.04 M) spectrum of **2b**.



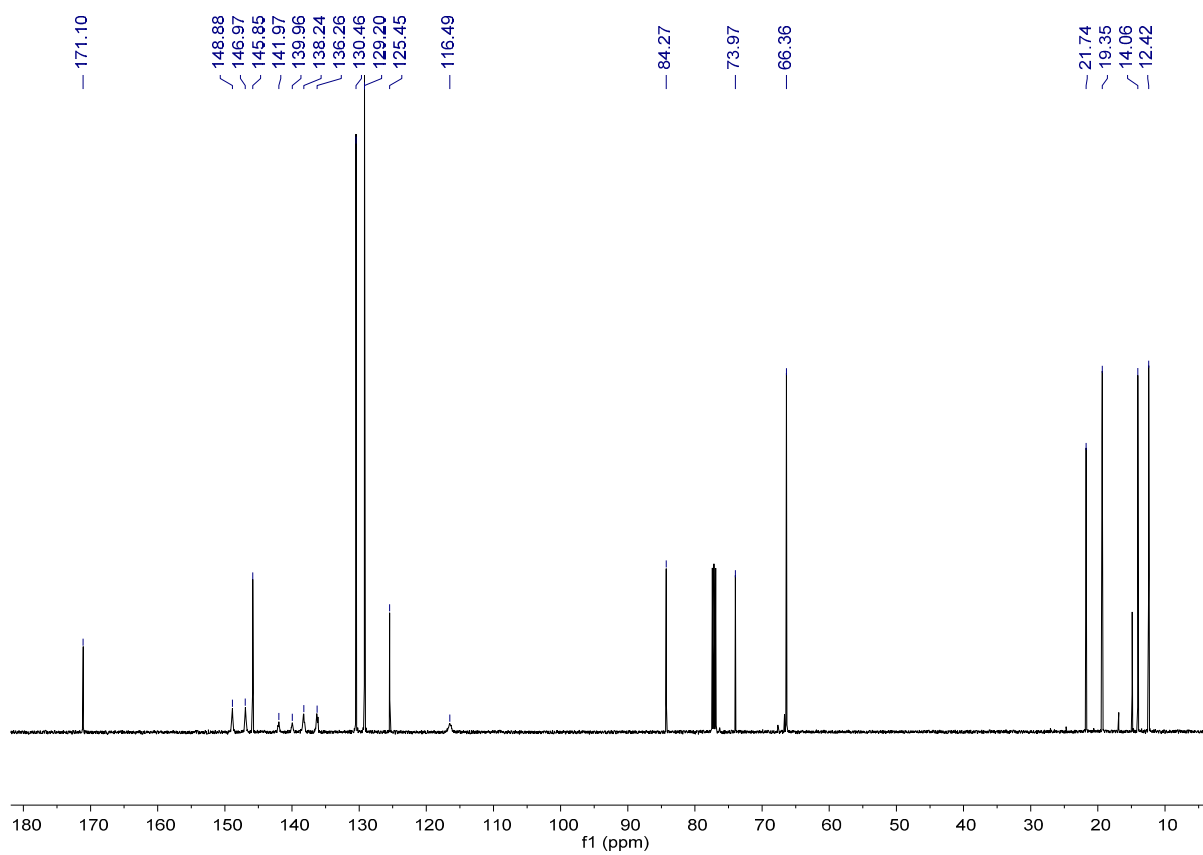
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K) spectra of **2b** across concentrations 0.04–0.4 M.



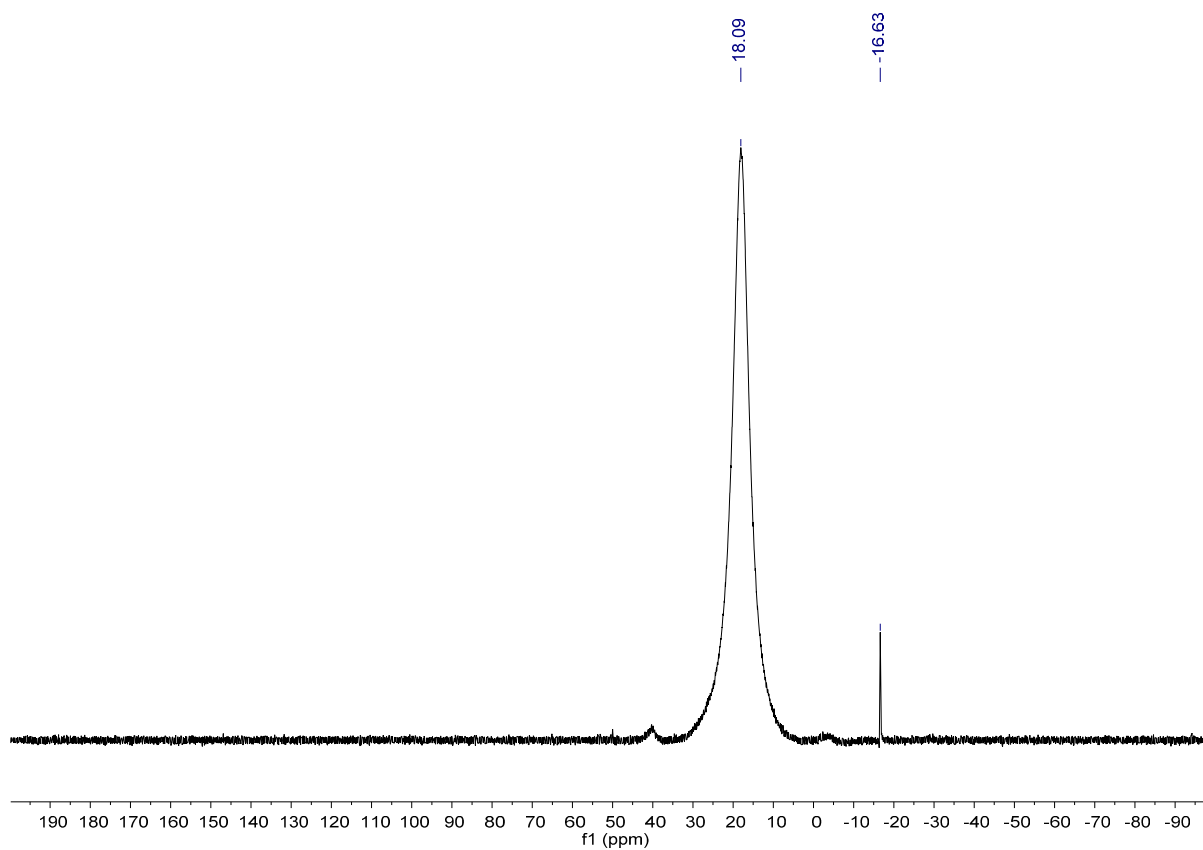
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K) spectra of **2b**, (expansion of $\text{CH}_2\text{O}(\text{CO})^-$) across concentrations 0.04–0.4 M.



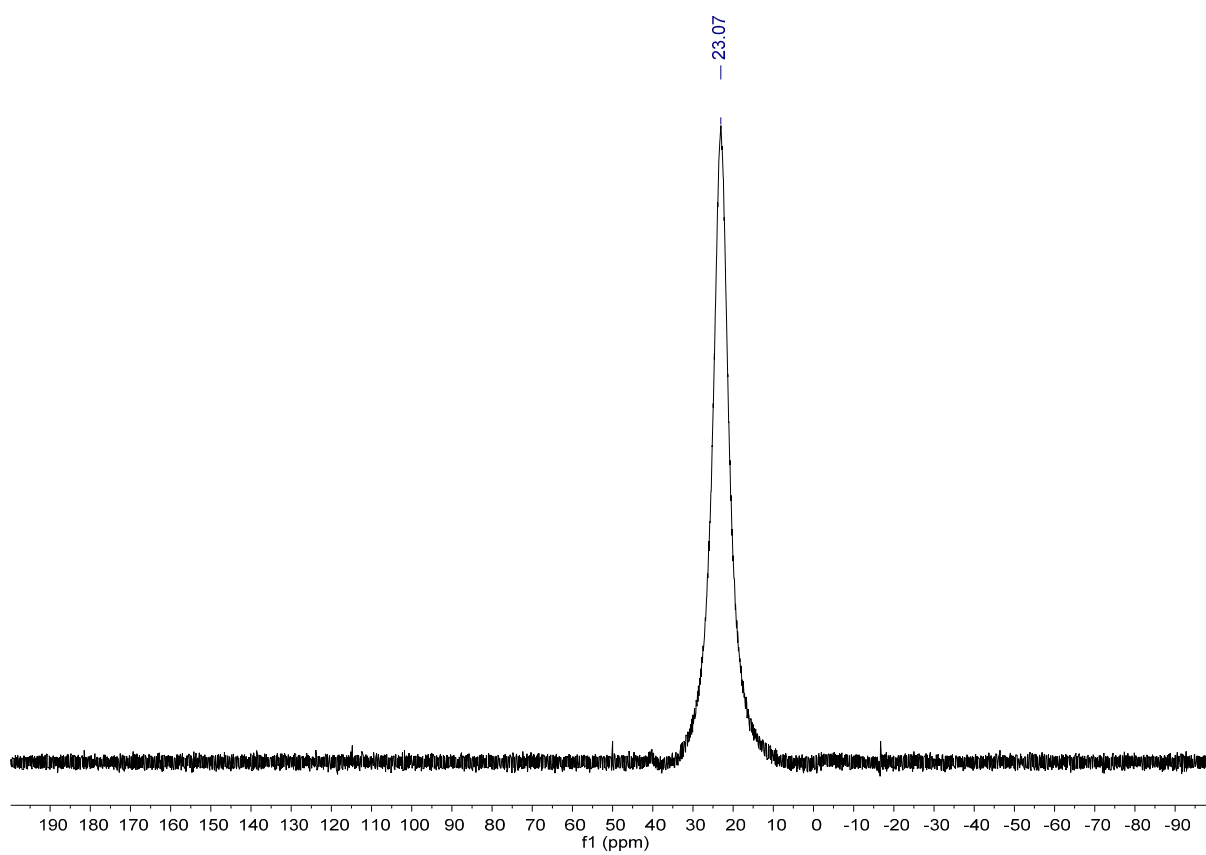
In situ ^{13}C -NMR (125 MHz, CDCl_3 , 298K, 0.2 M) spectrum of **2b**.



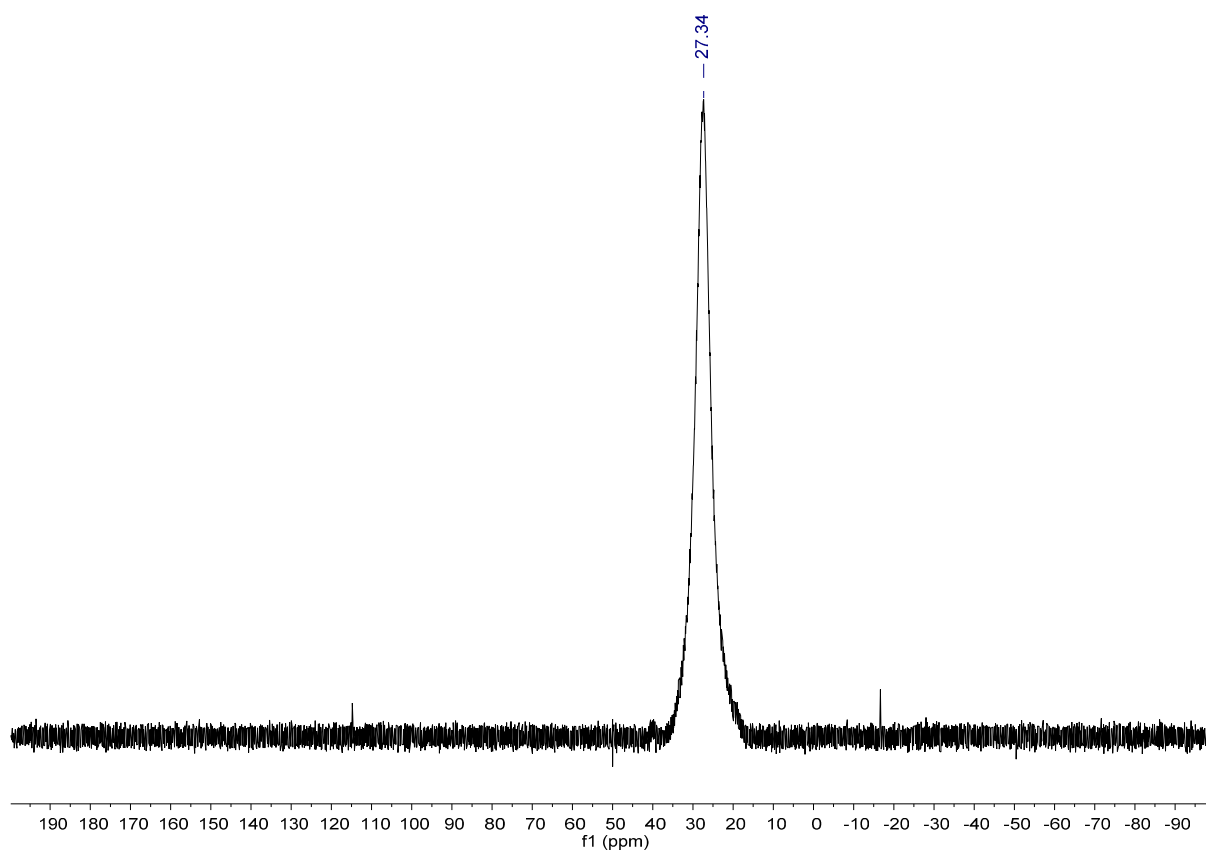
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.4 M) spectrum of **2b**.



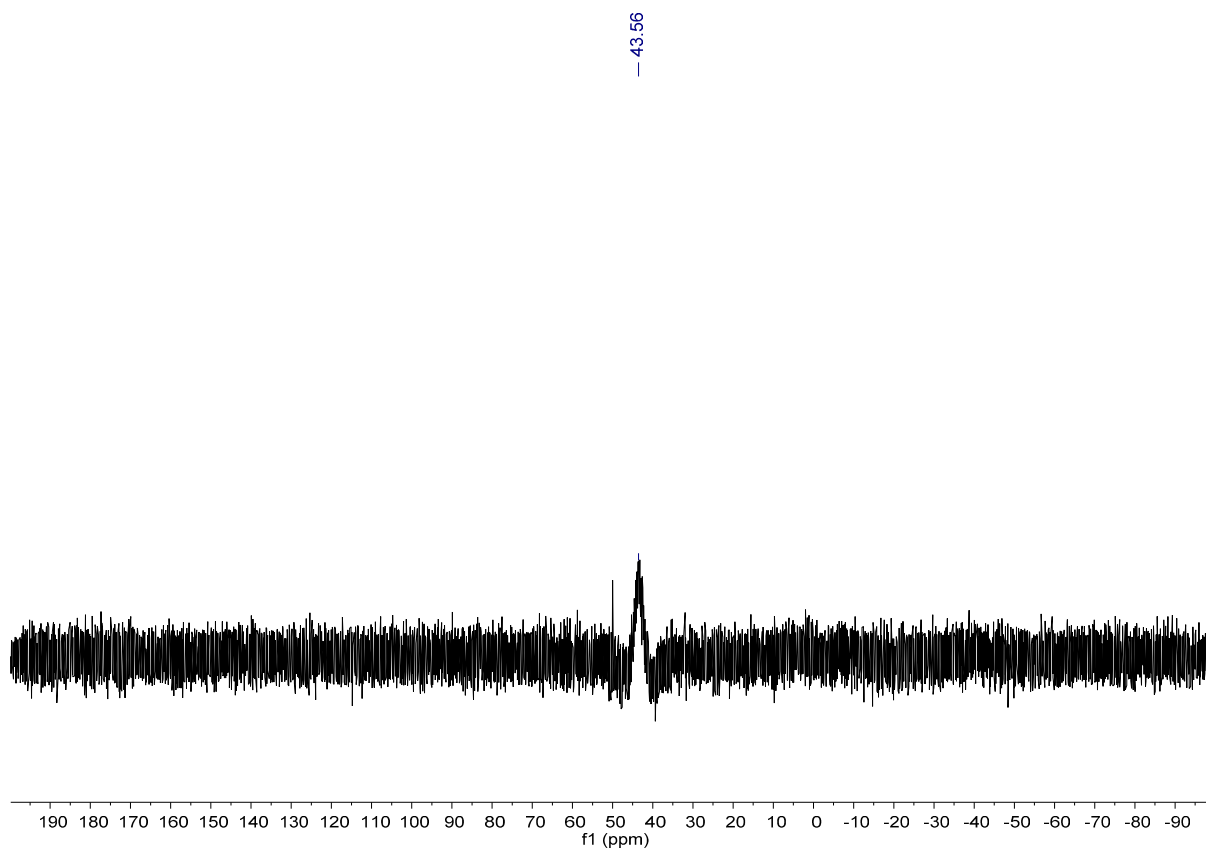
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.2 M) spectrum of **2b**.



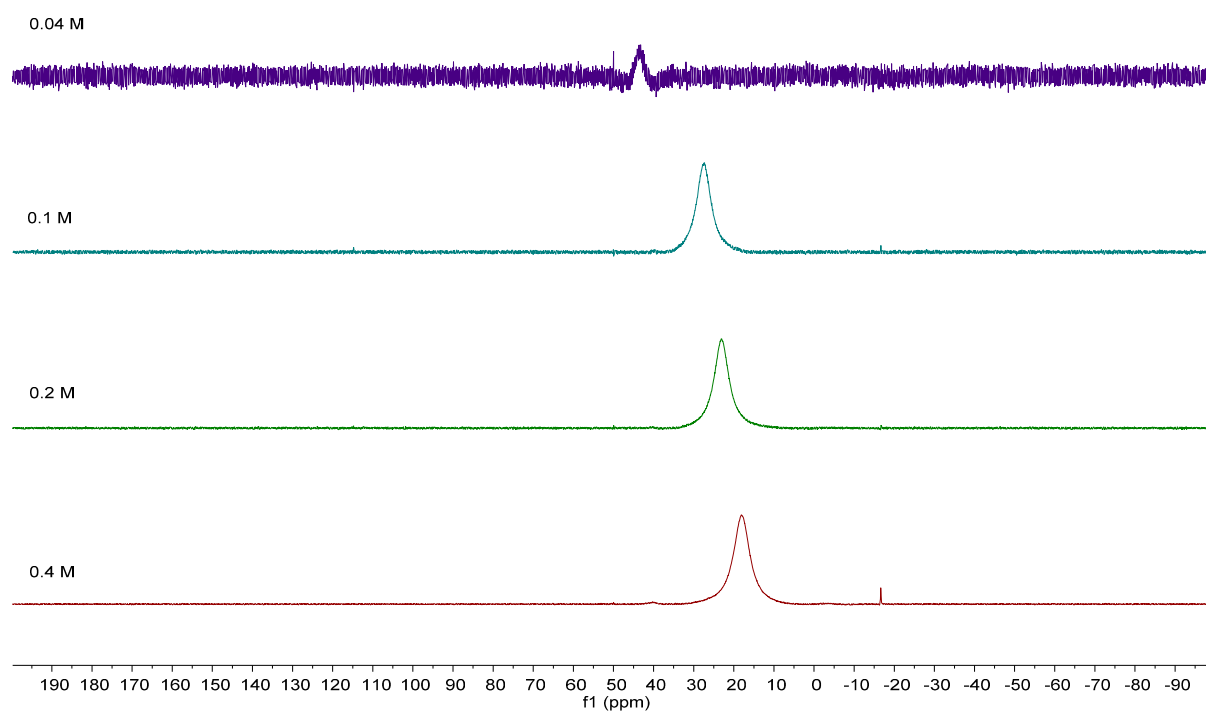
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.1 M) spectrum of **2b**.



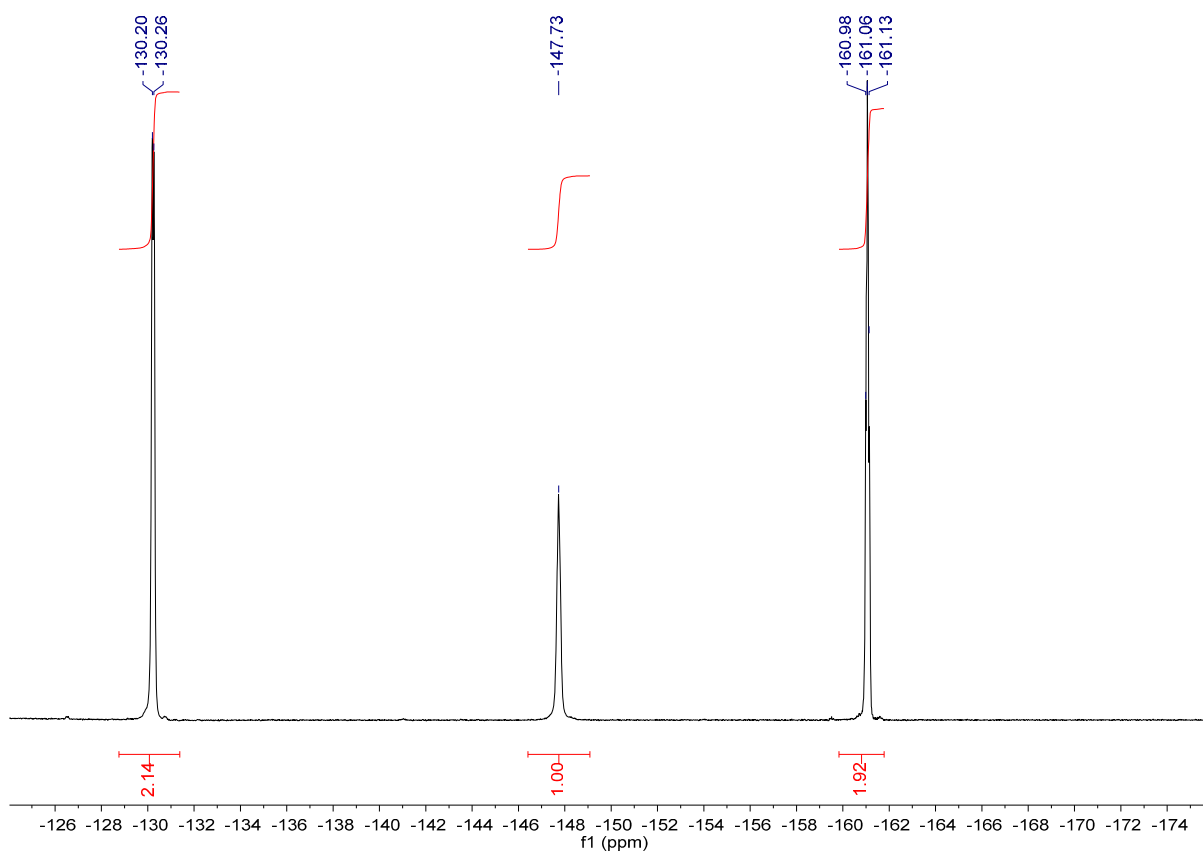
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.04 M) spectrum of **2b**.



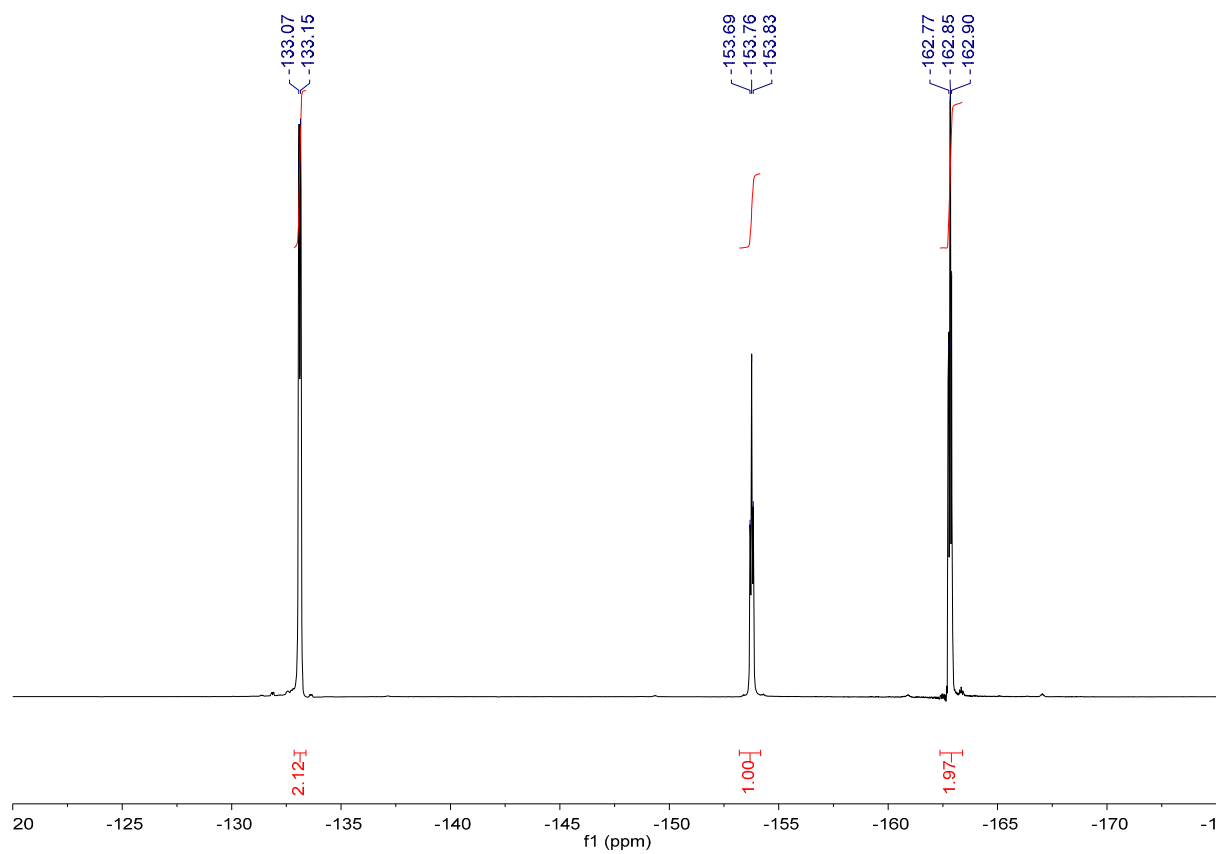
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K) spectra of **2a** across concentrations 0.04–0.4 M.



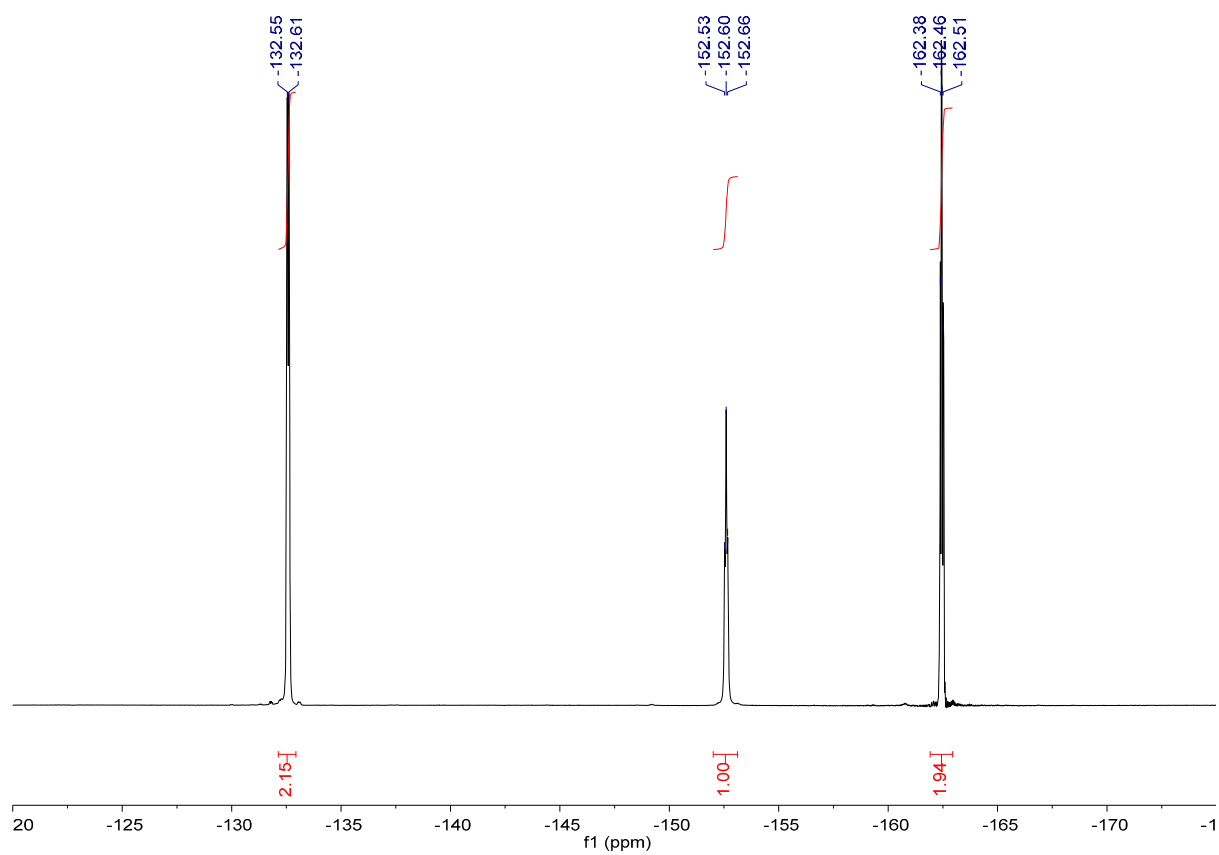
^{19}F -NMR (283 MHz, CDCl_3 , 298 K) spectrum of **2b** crystals.



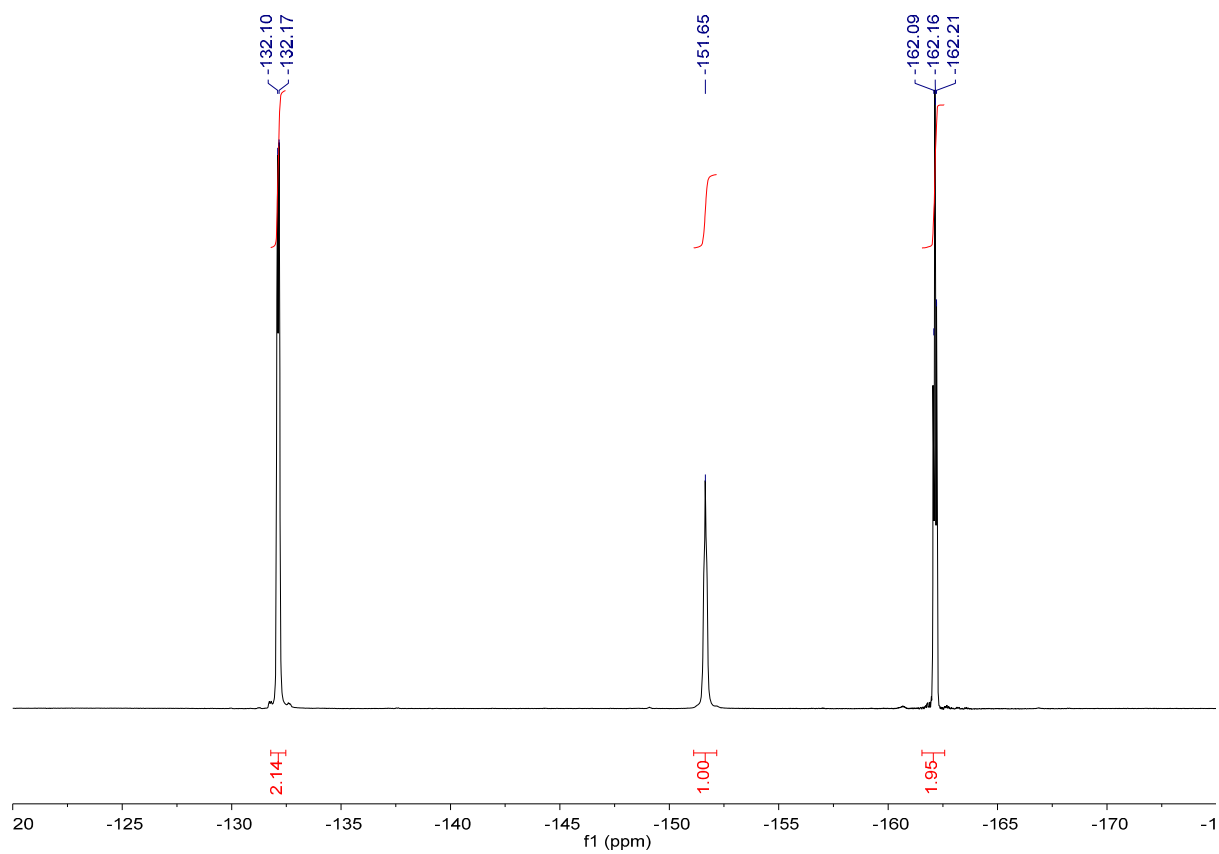
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.4 M) spectrum of **2b**.



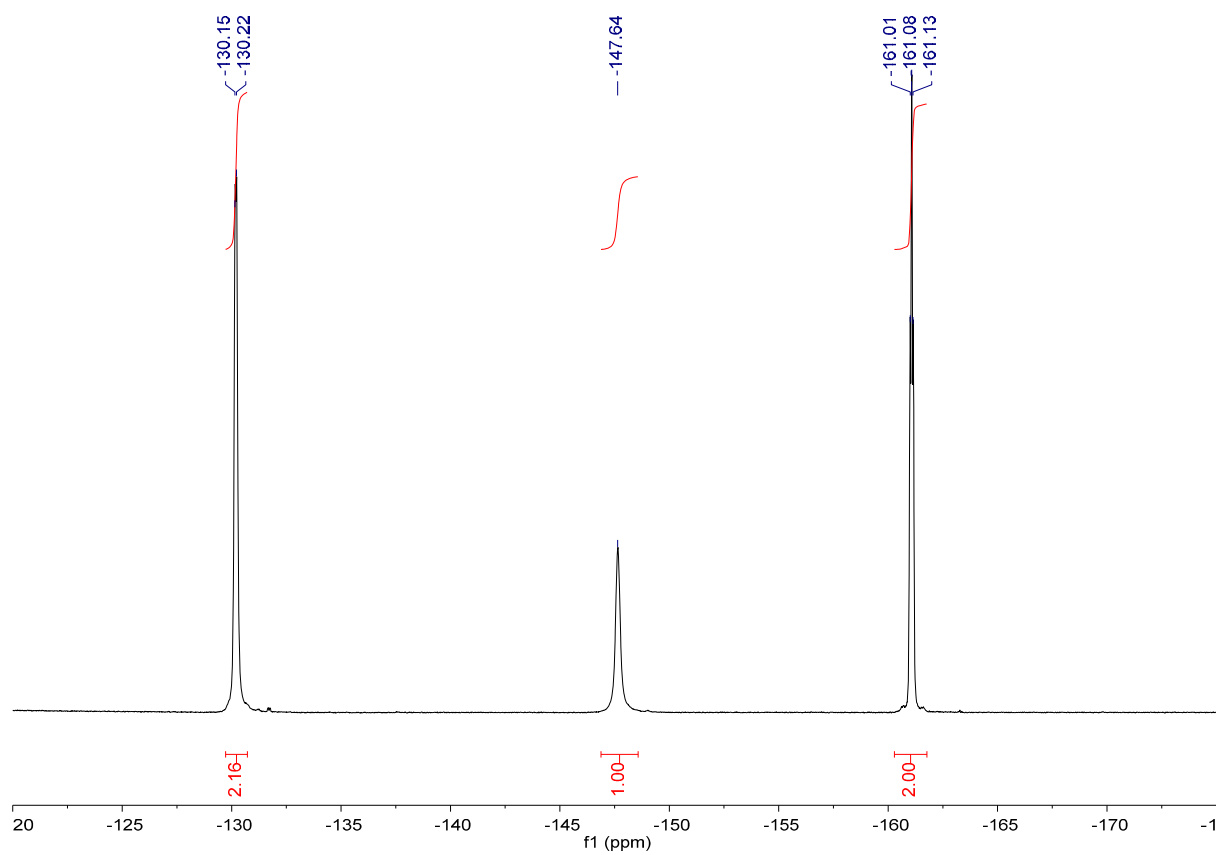
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.2 M) spectrum of **2b**.



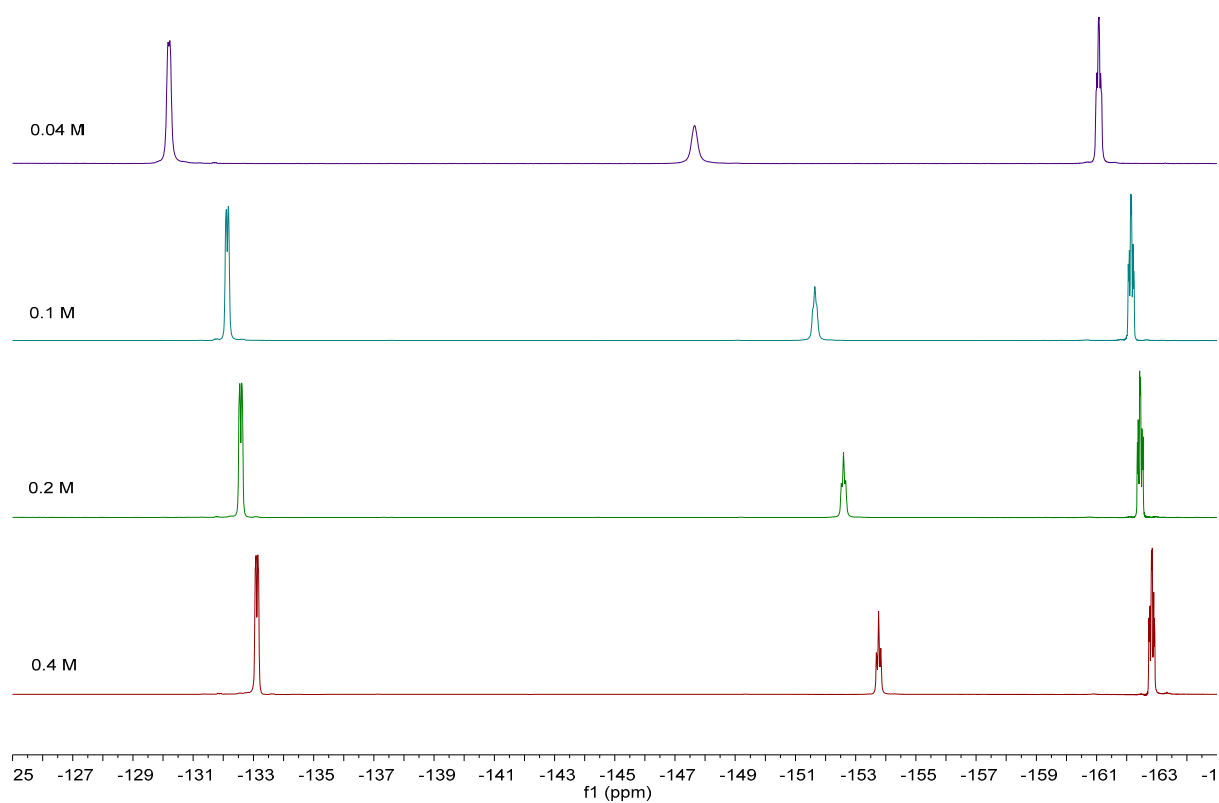
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.1 M) spectrum of **2b**.



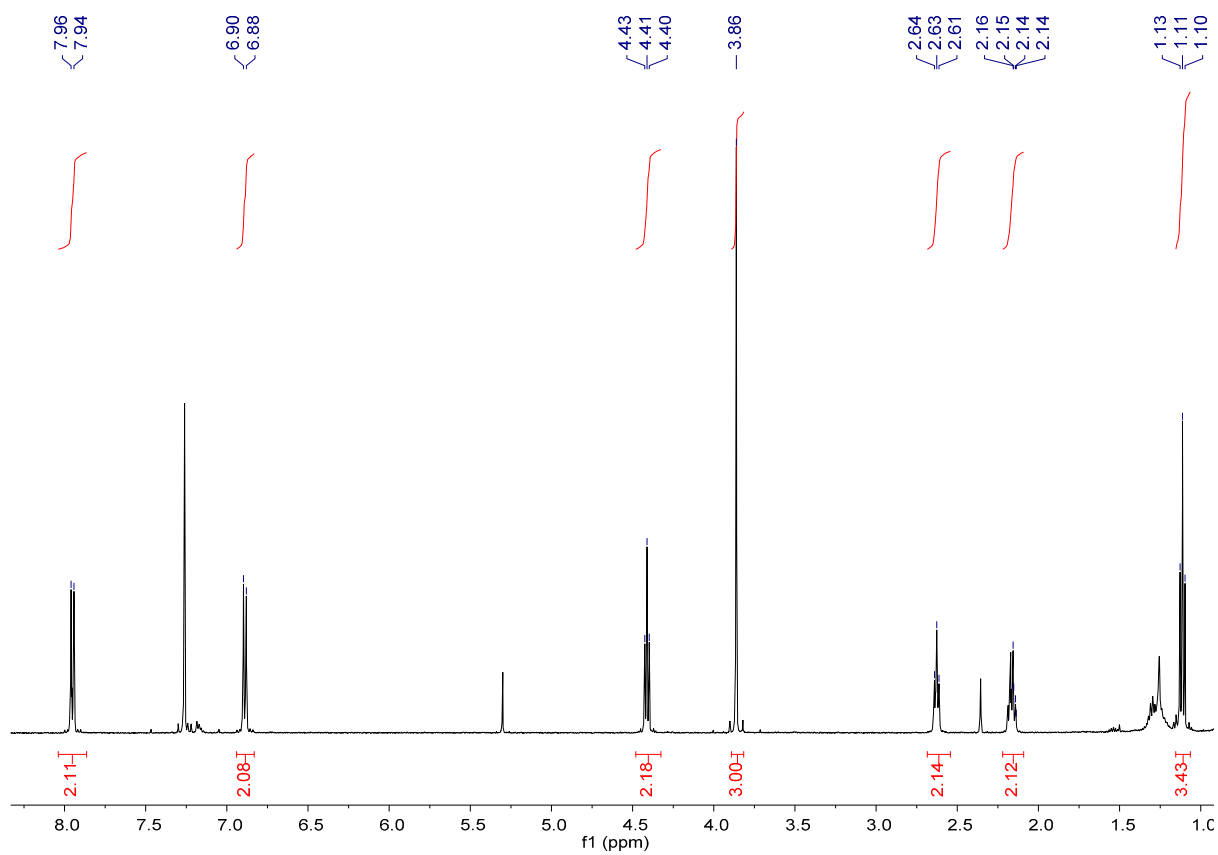
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.04 M) spectrum of **2b**.



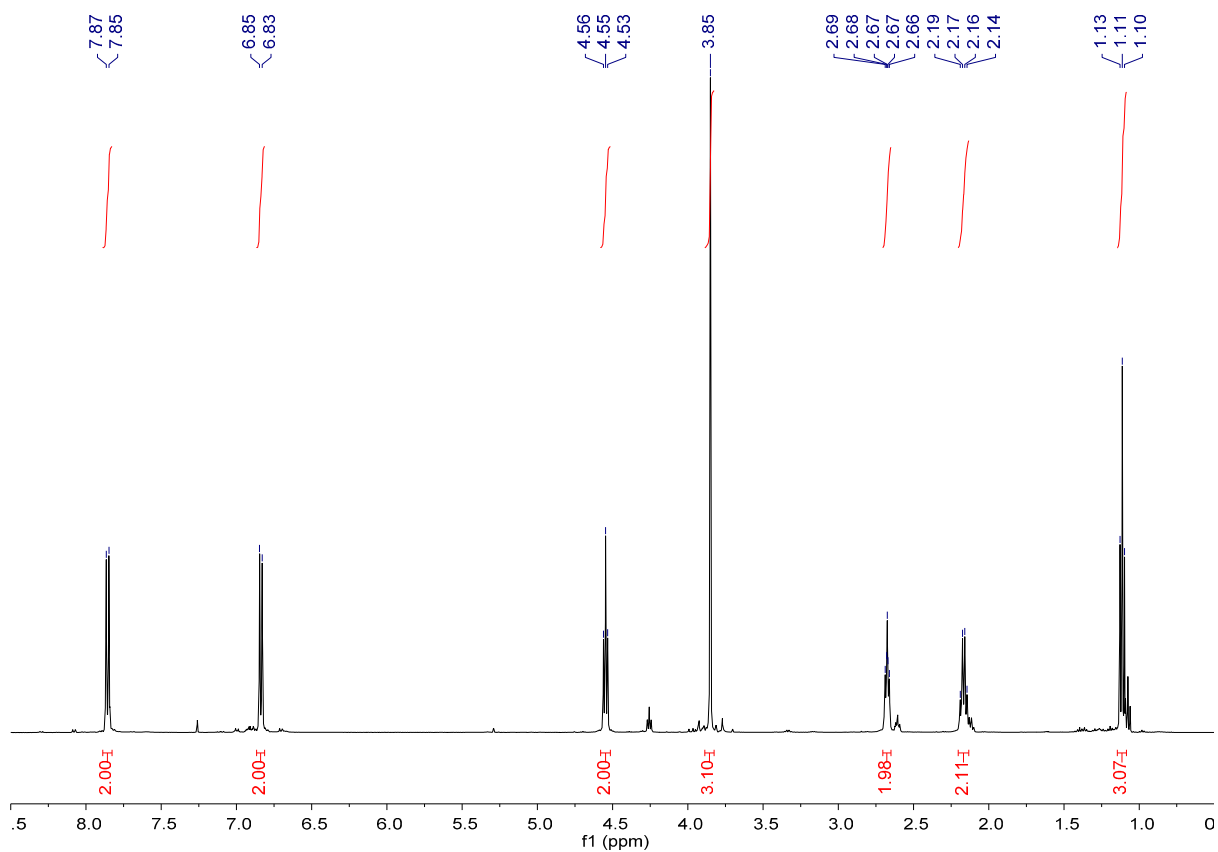
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K) spectra of **2b** across concentrations 0.04–0.4 M



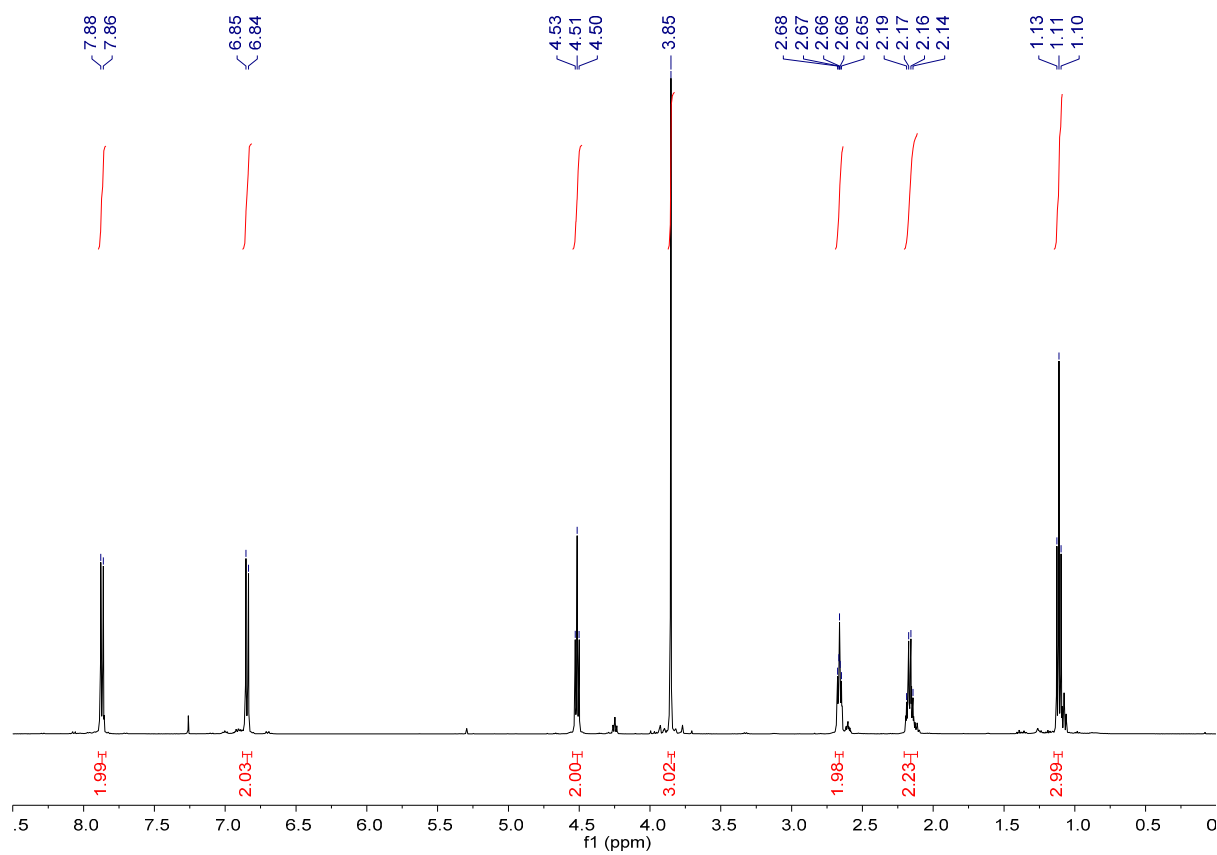
^1H -NMR (500 MHz, CDCl_3 , 298K) spectrum of **2c** crystals.



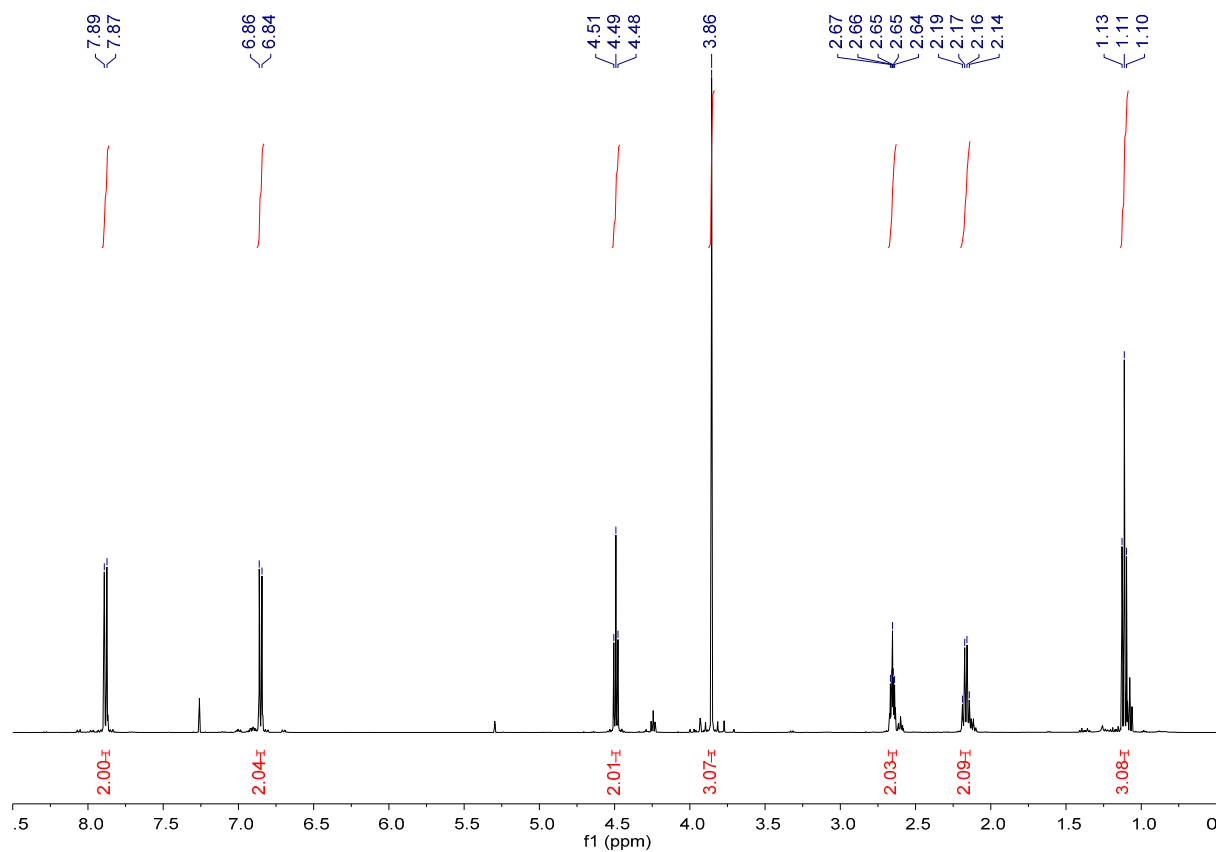
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.4 M) spectrum of **2c**.



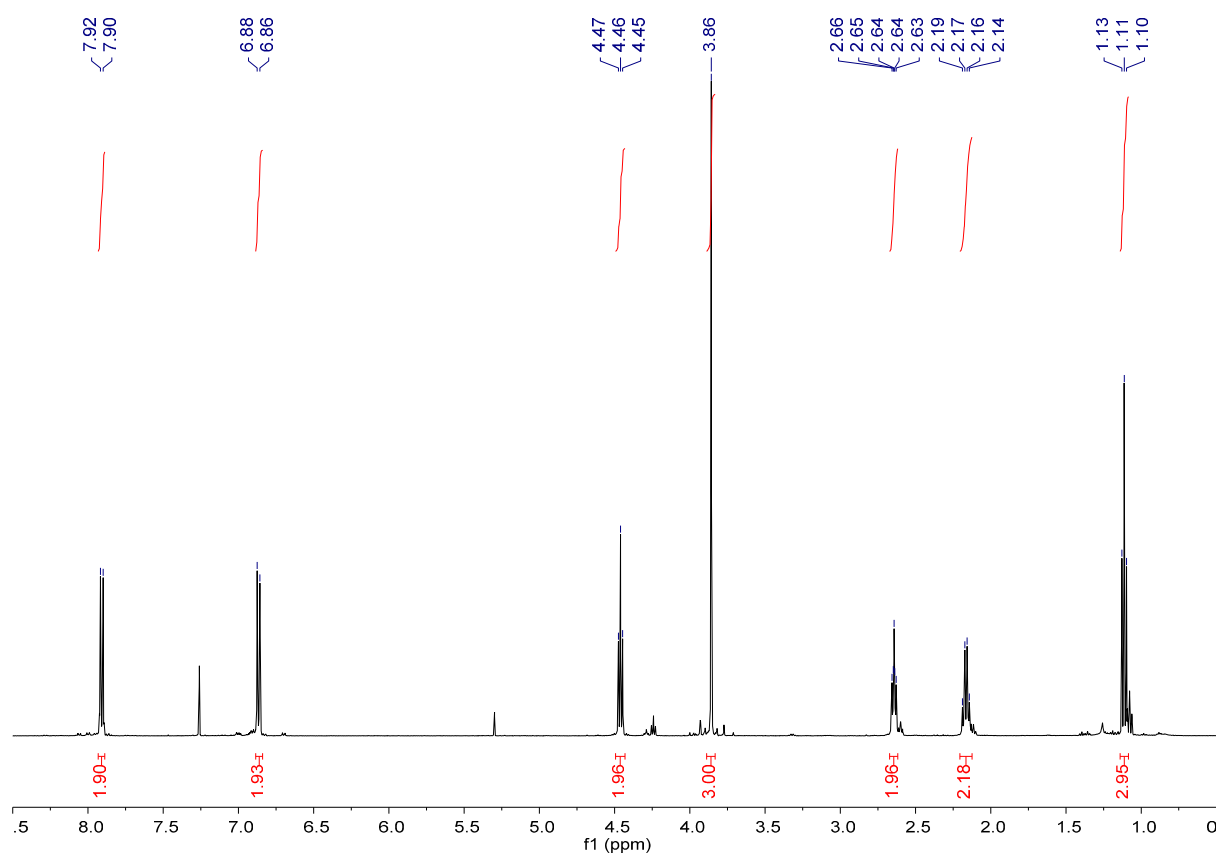
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.2 M) spectrum of **2c**.



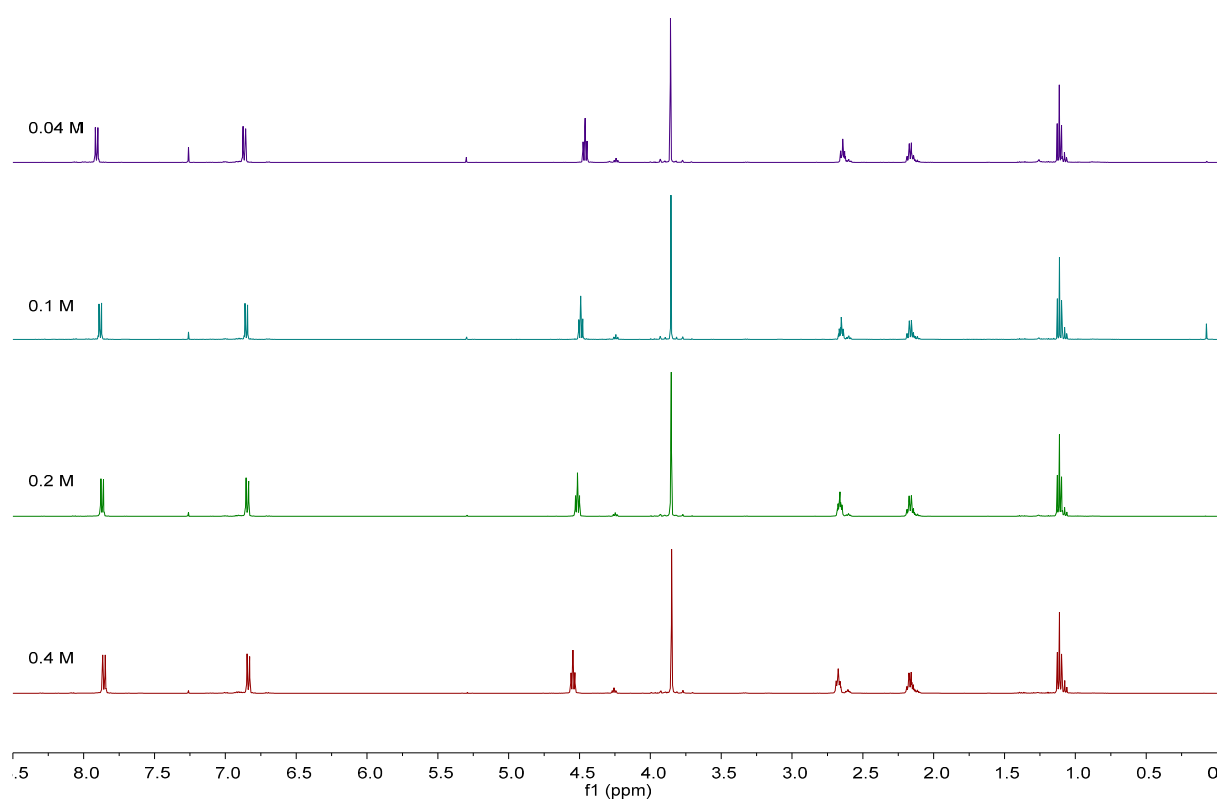
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.1 M) spectrum of **2c**.



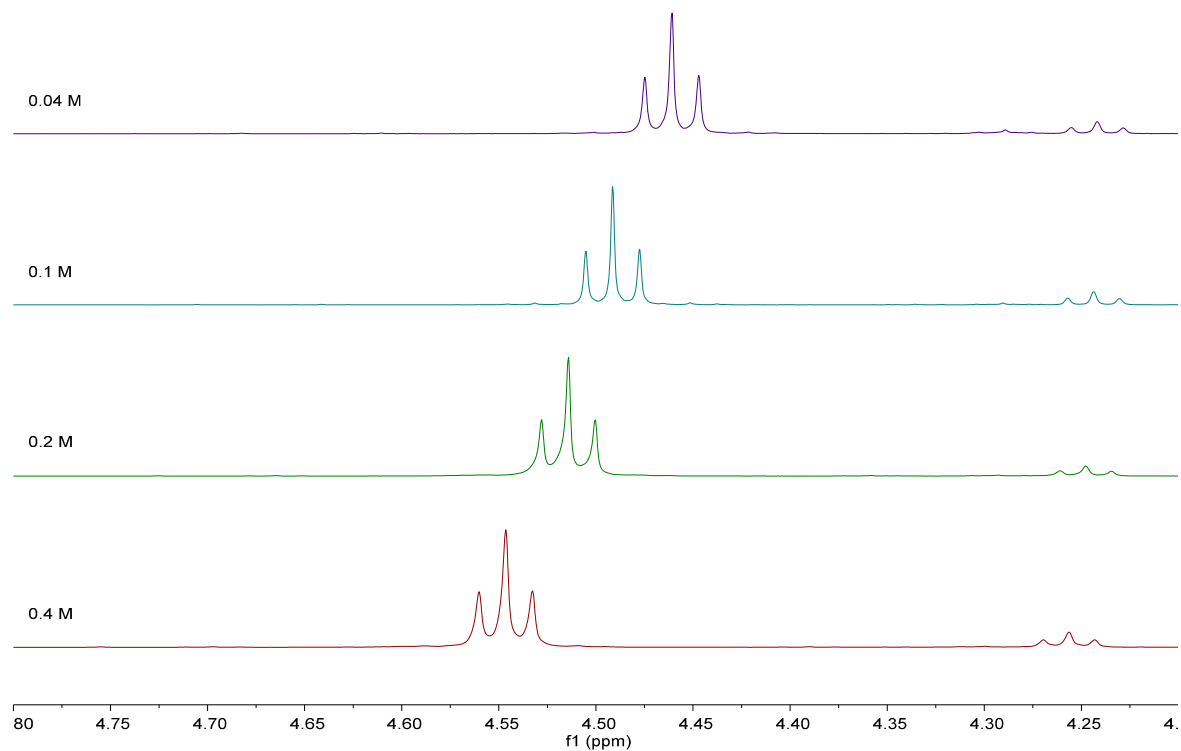
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K, 0.04 M) spectrum of **2c**.



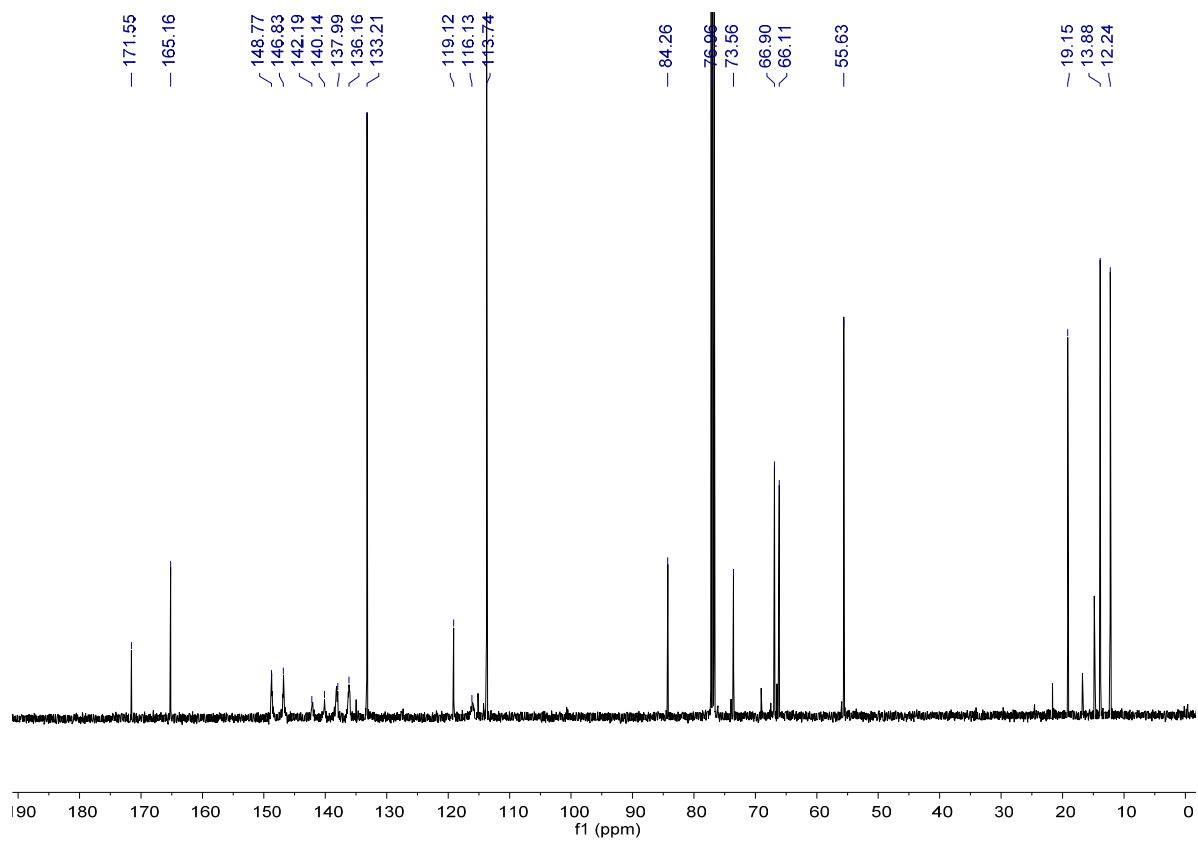
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K) spectra of **2c** across concentrations 0.04–0.4 M.



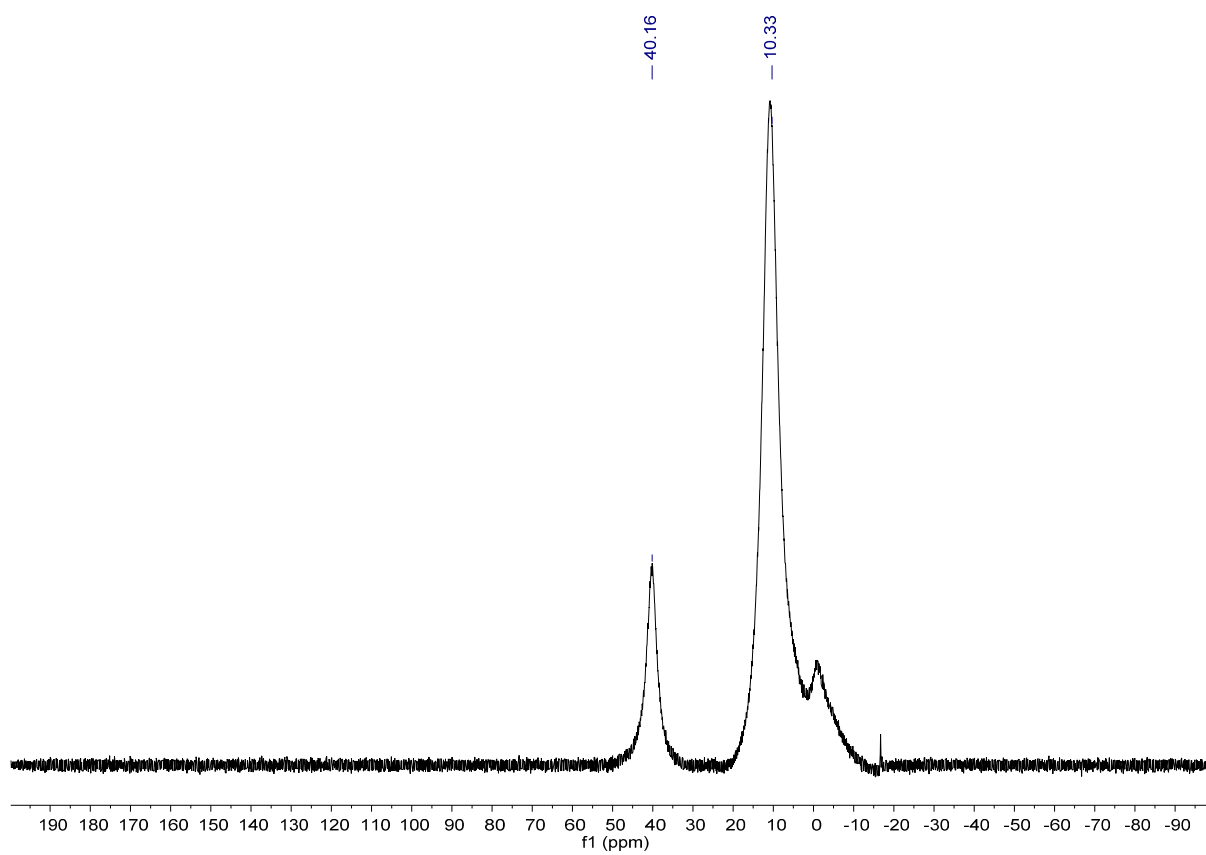
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K) spectra of **2c**, expansion of $\text{CH}_2\text{O}(\text{CO})$ -) across concentrations 0.04 – 0.4 M.



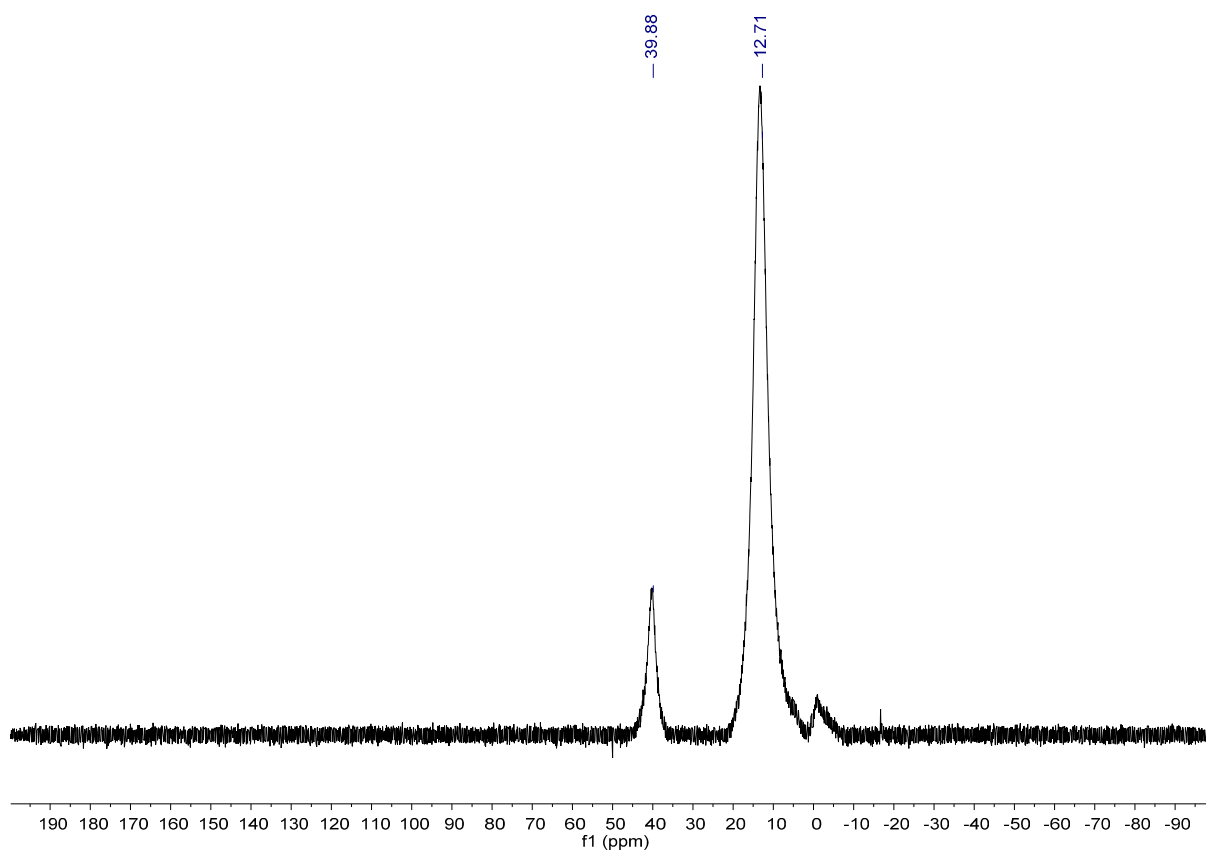
In situ ^{13}C -NMR (125 MHz, CDCl_3 , 298K, 0.2 M) spectrum of **2c**



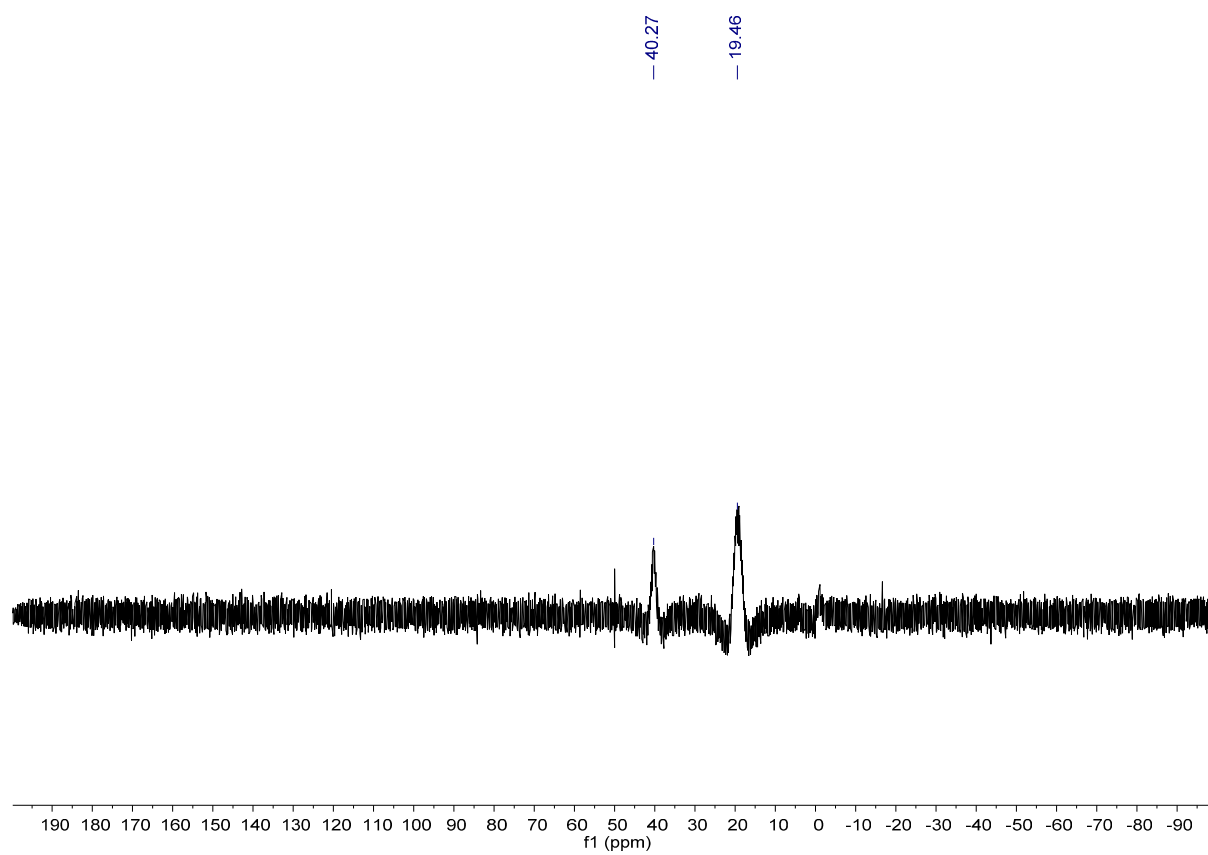
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.4 M) spectrum of **2c**.



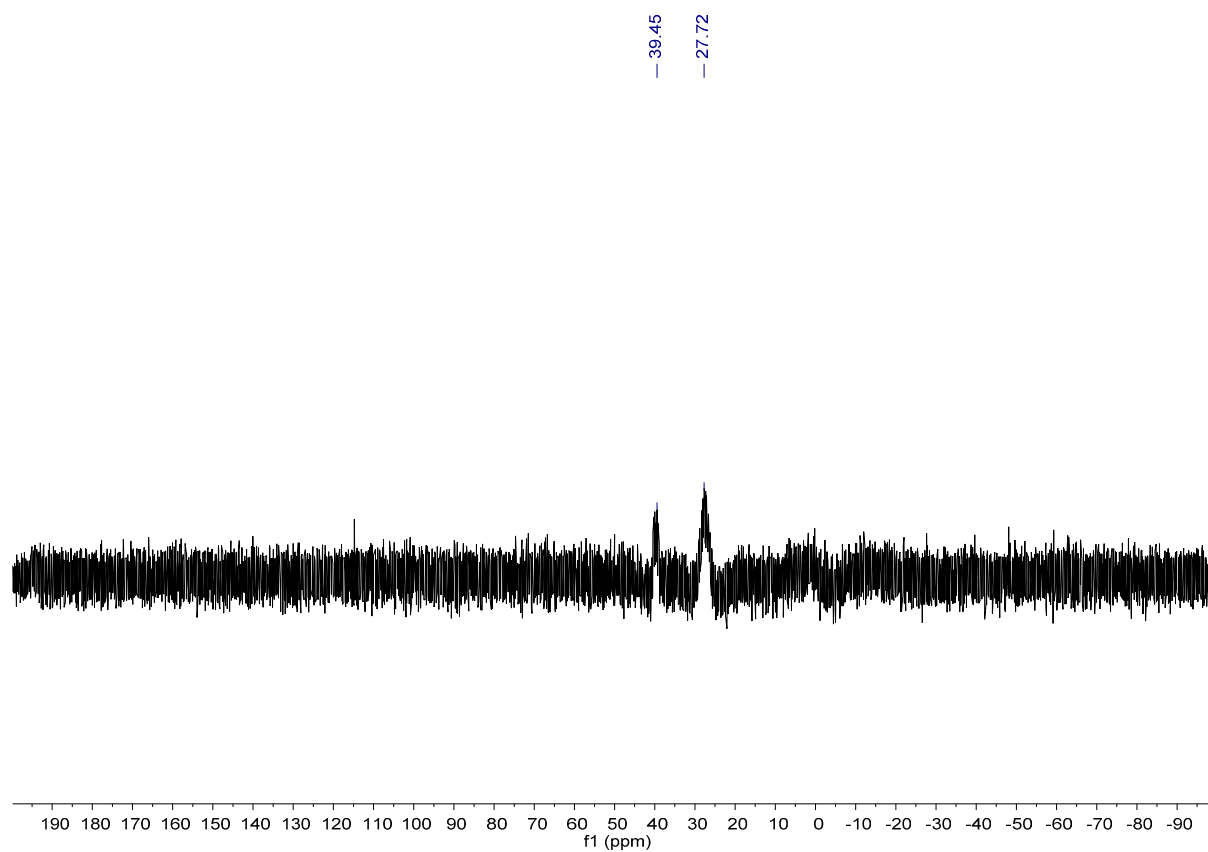
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.2 M) spectrum of **2c**.



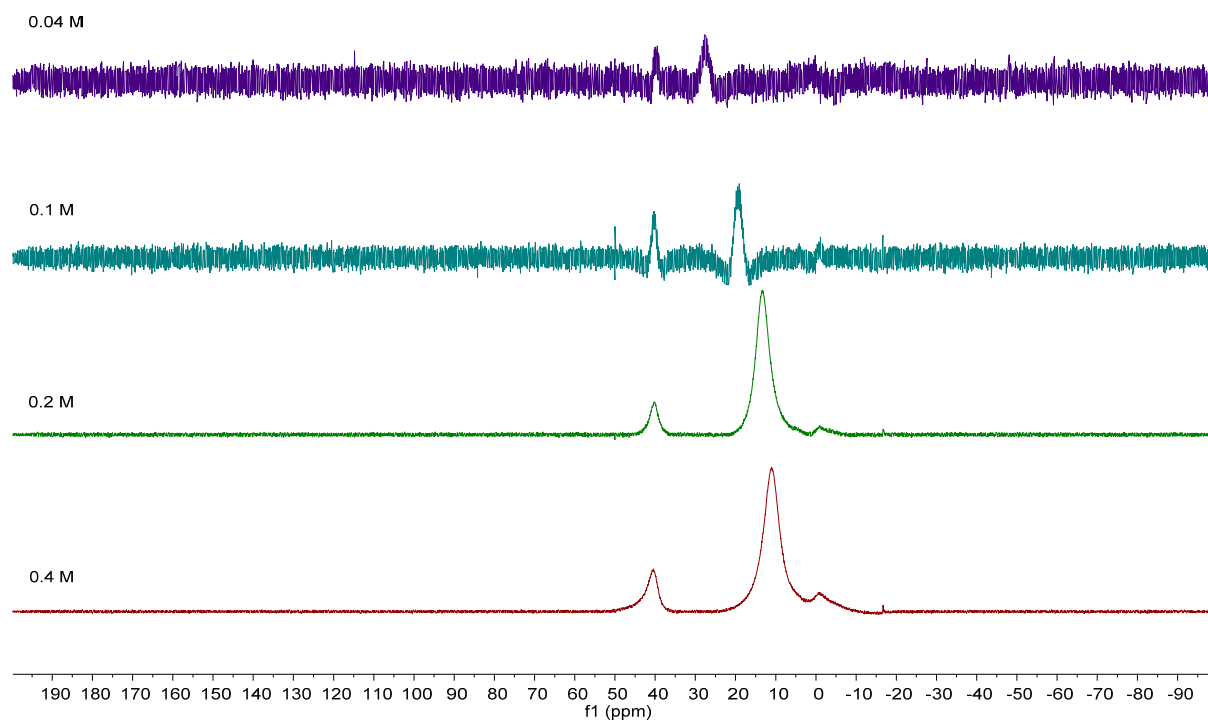
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.1 M) spectrum of **2c**.



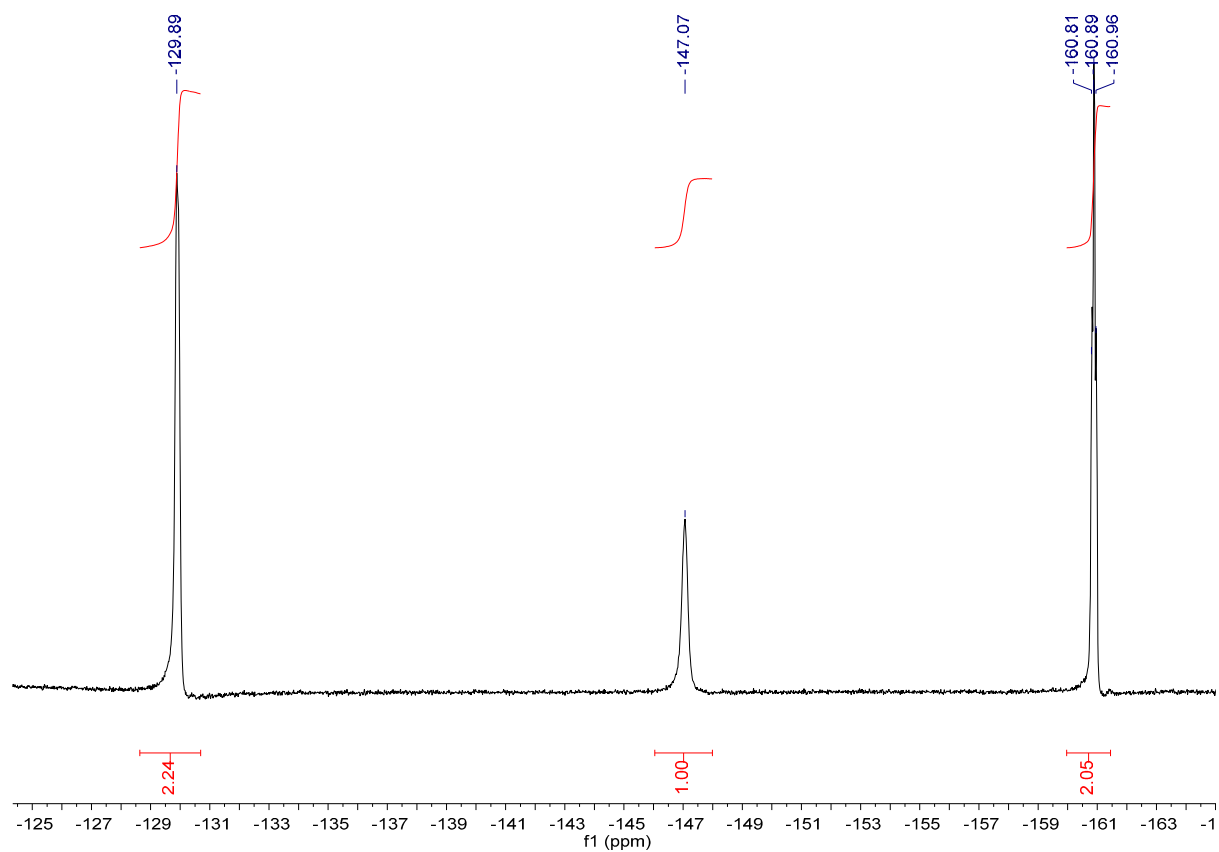
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K, 0.04 M) spectrum of **2c**.



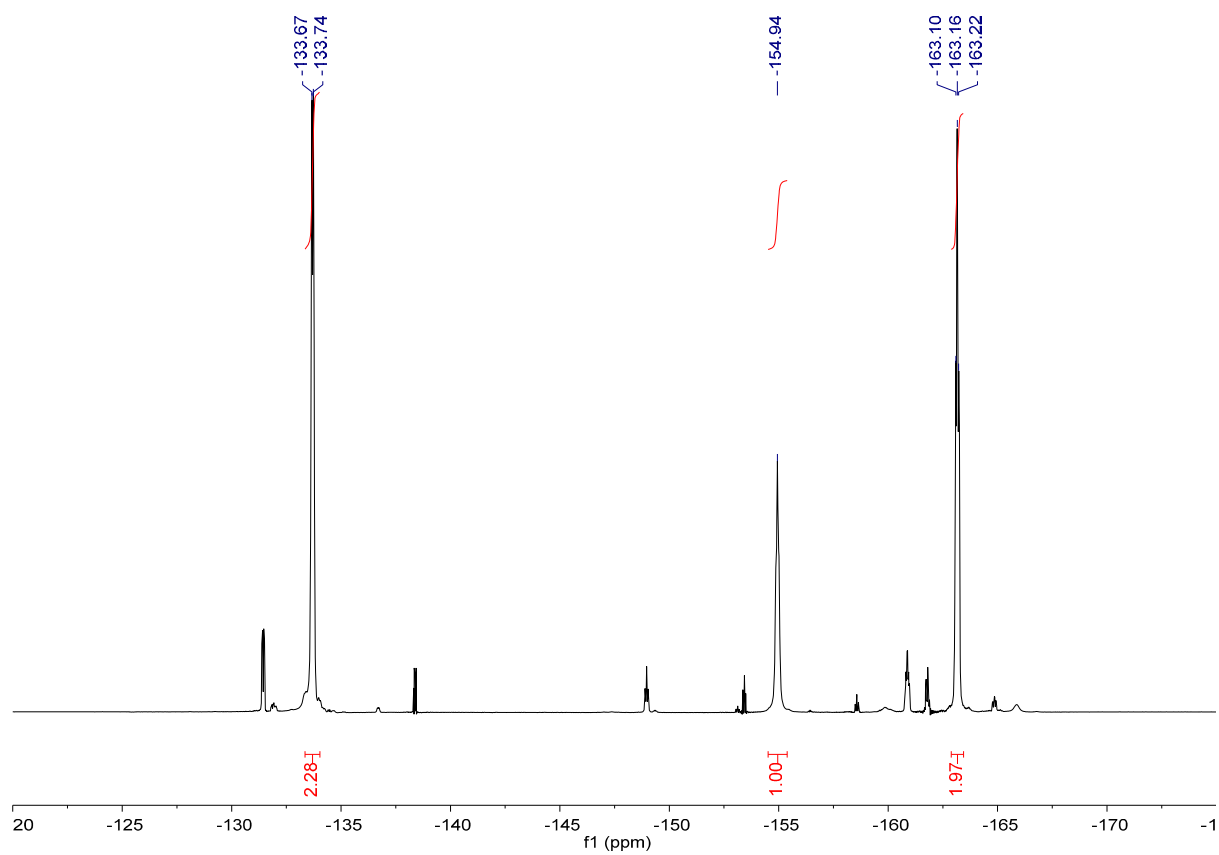
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K) spectrum of **2c** across concentrations 0.04–0.4 M.



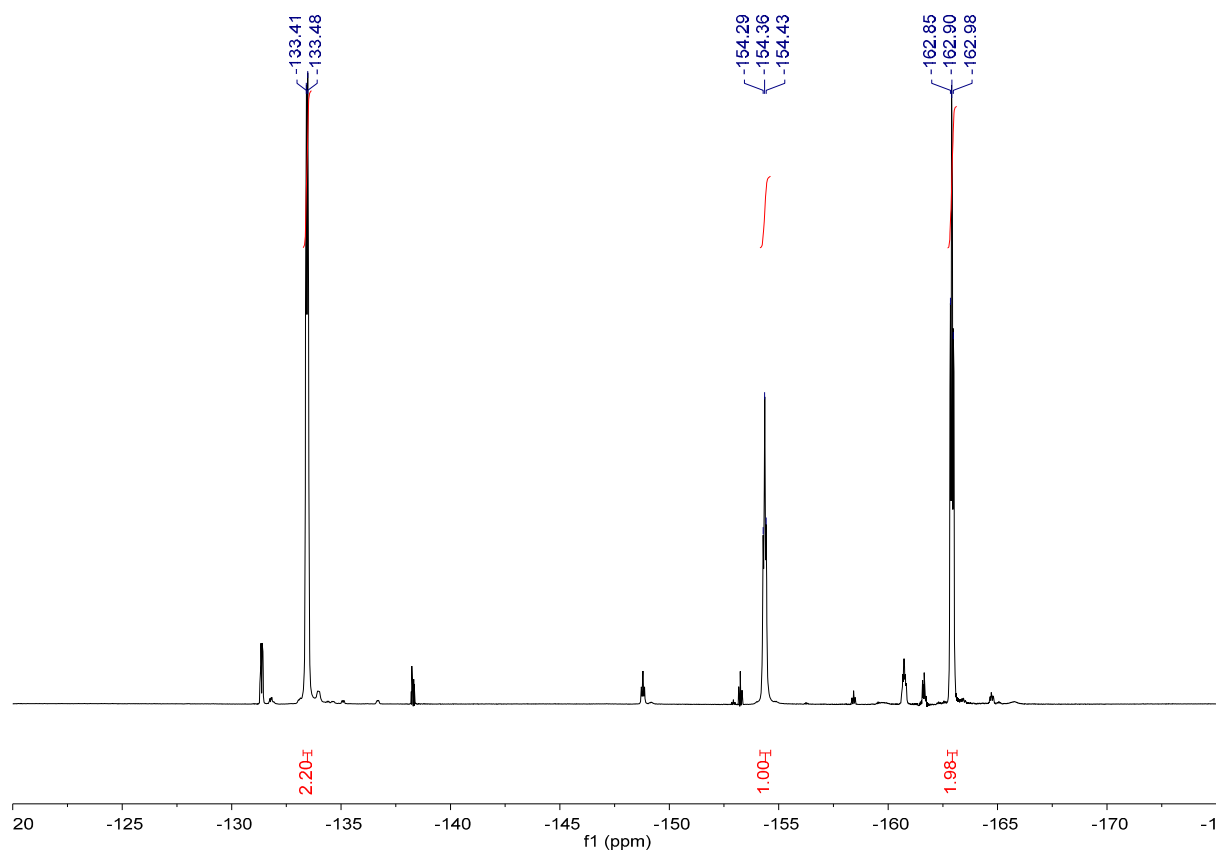
^{19}F -NMR (283 MHz, CDCl_3 , 298 K) spectrum of **2c** crystals.



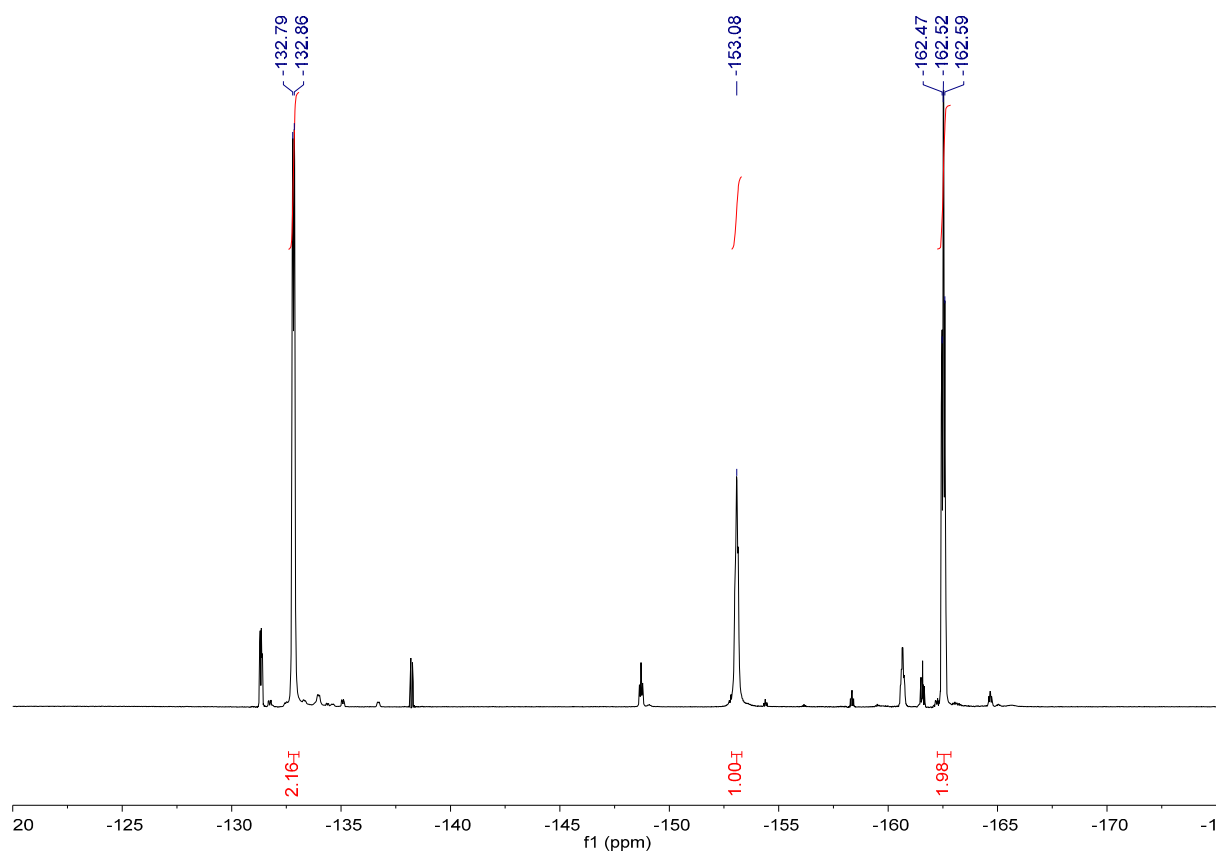
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.4 M) spectrum of **2c**.



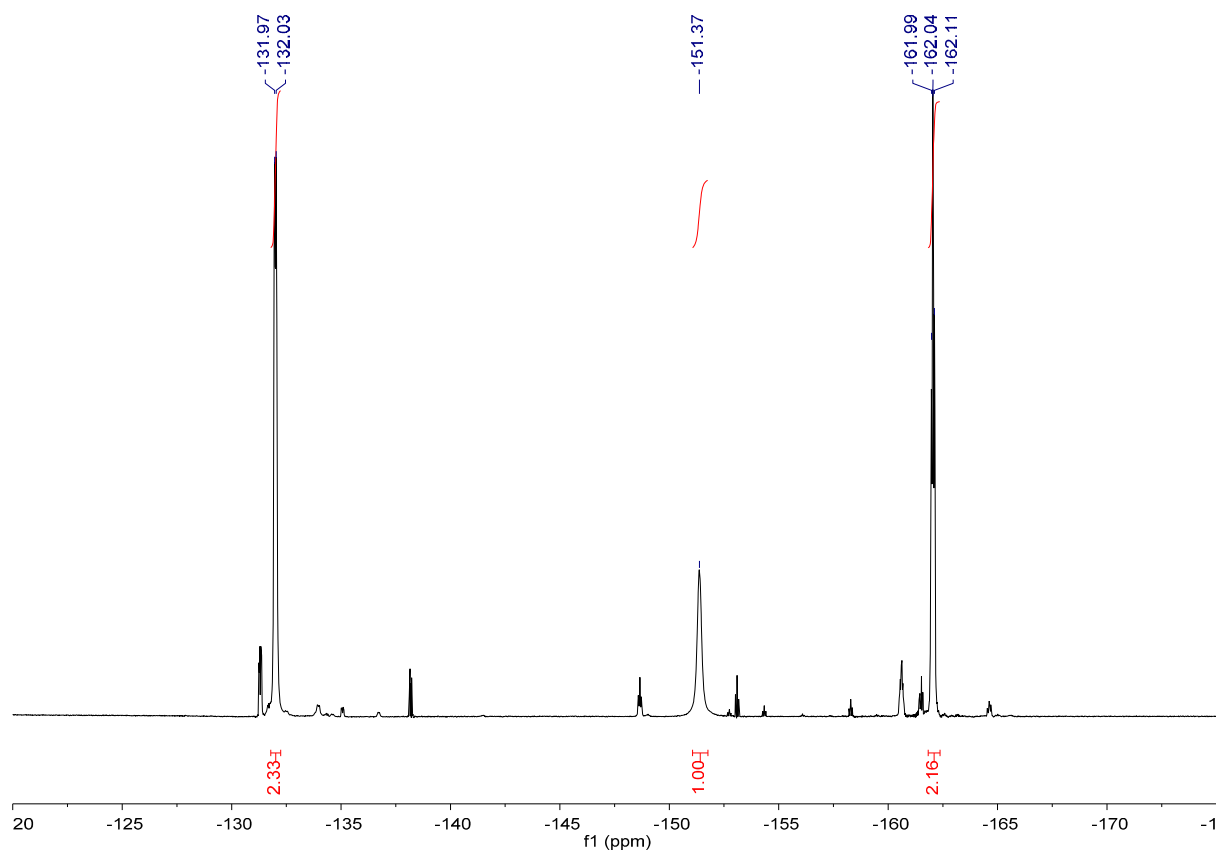
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.2 M) spectrum of **2c**.



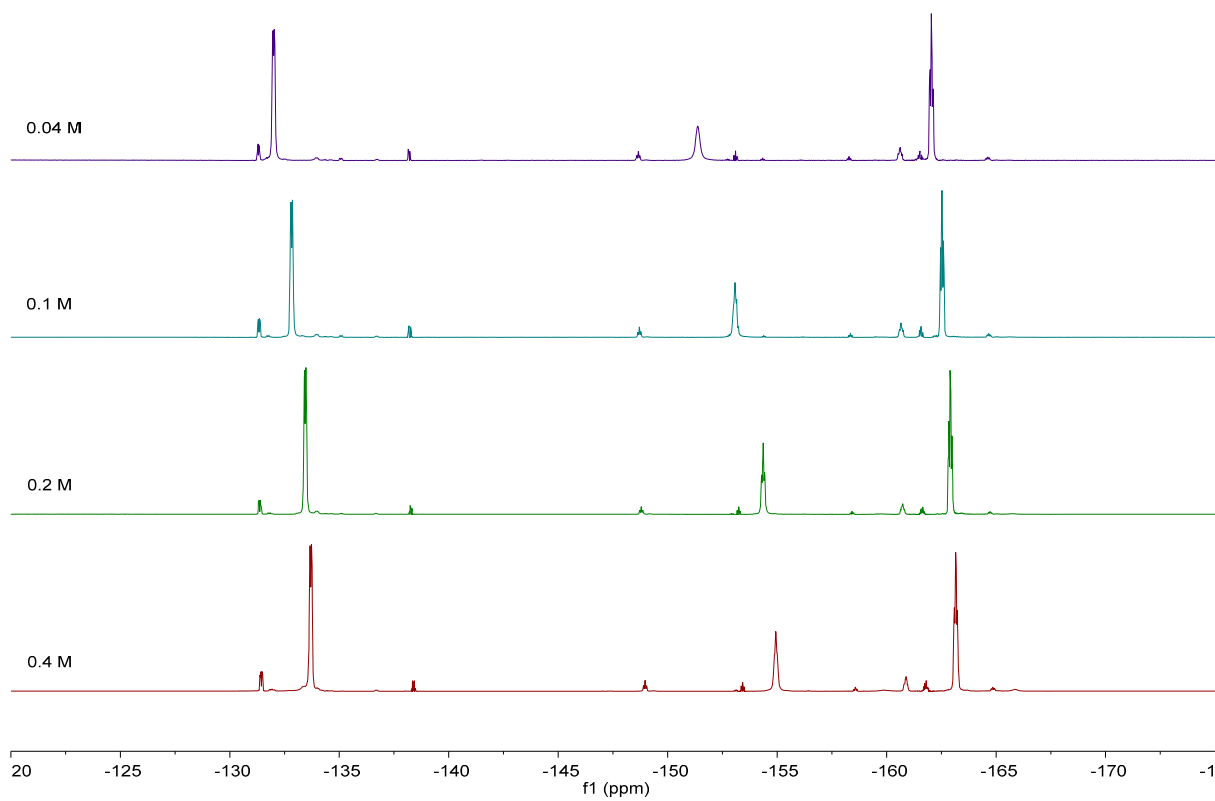
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.1 M) spectrum of **2c**.



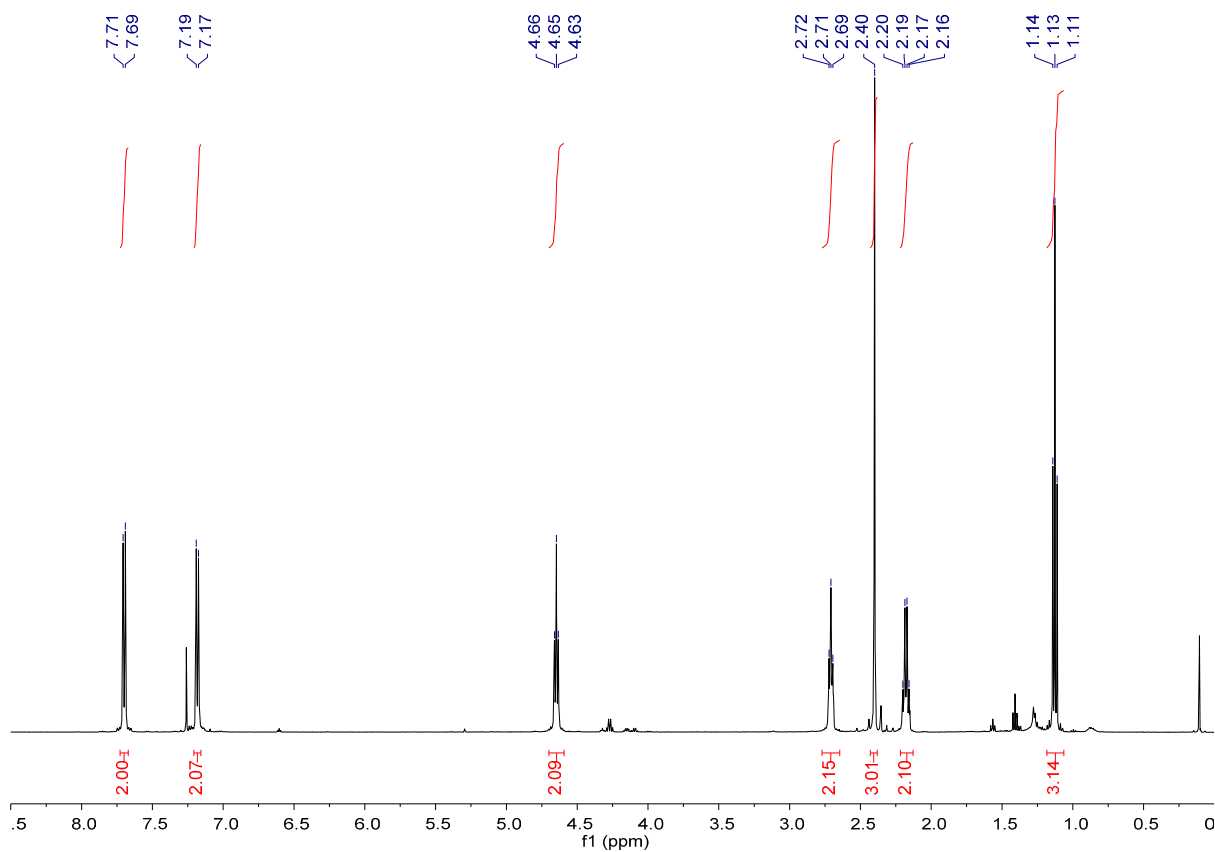
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K, 0.04 M) spectrum of **2c**.



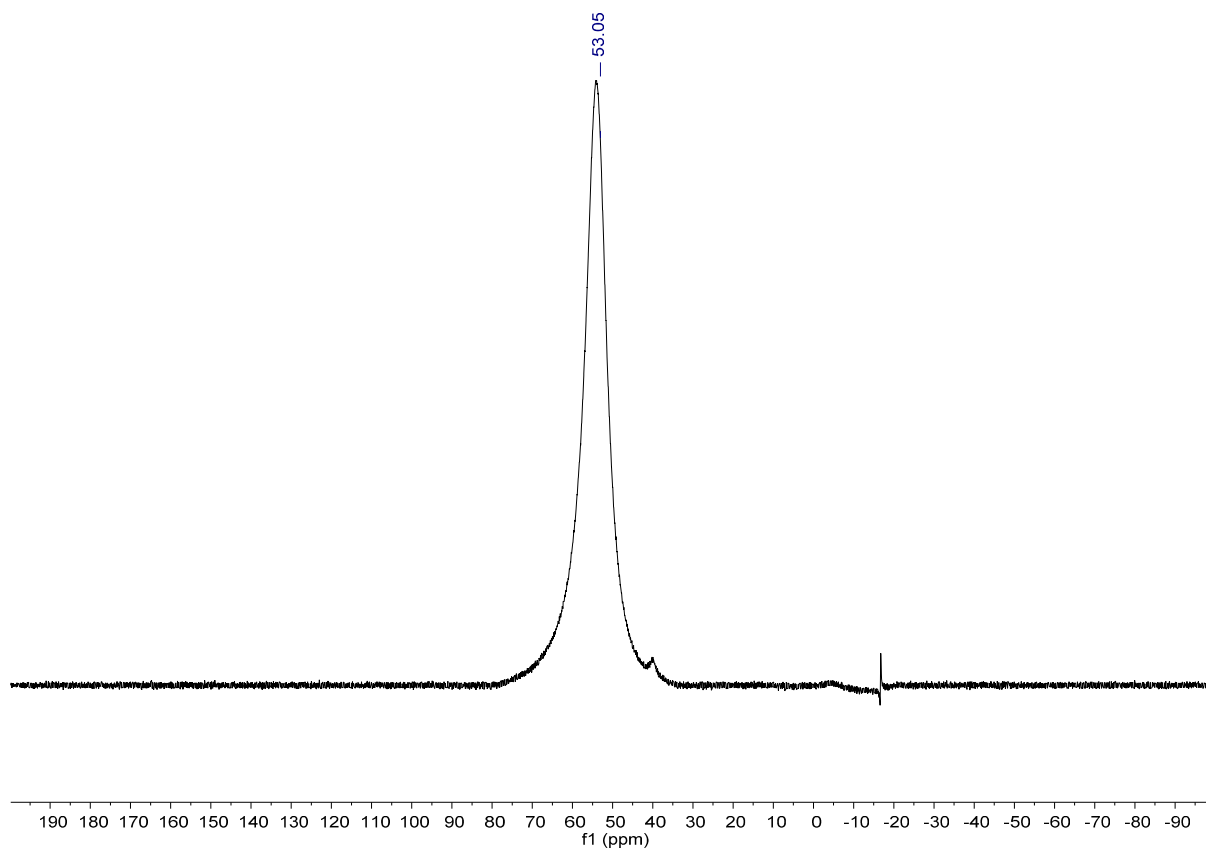
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K) spectra of **2c** across concentrations 0.04–0.4 M



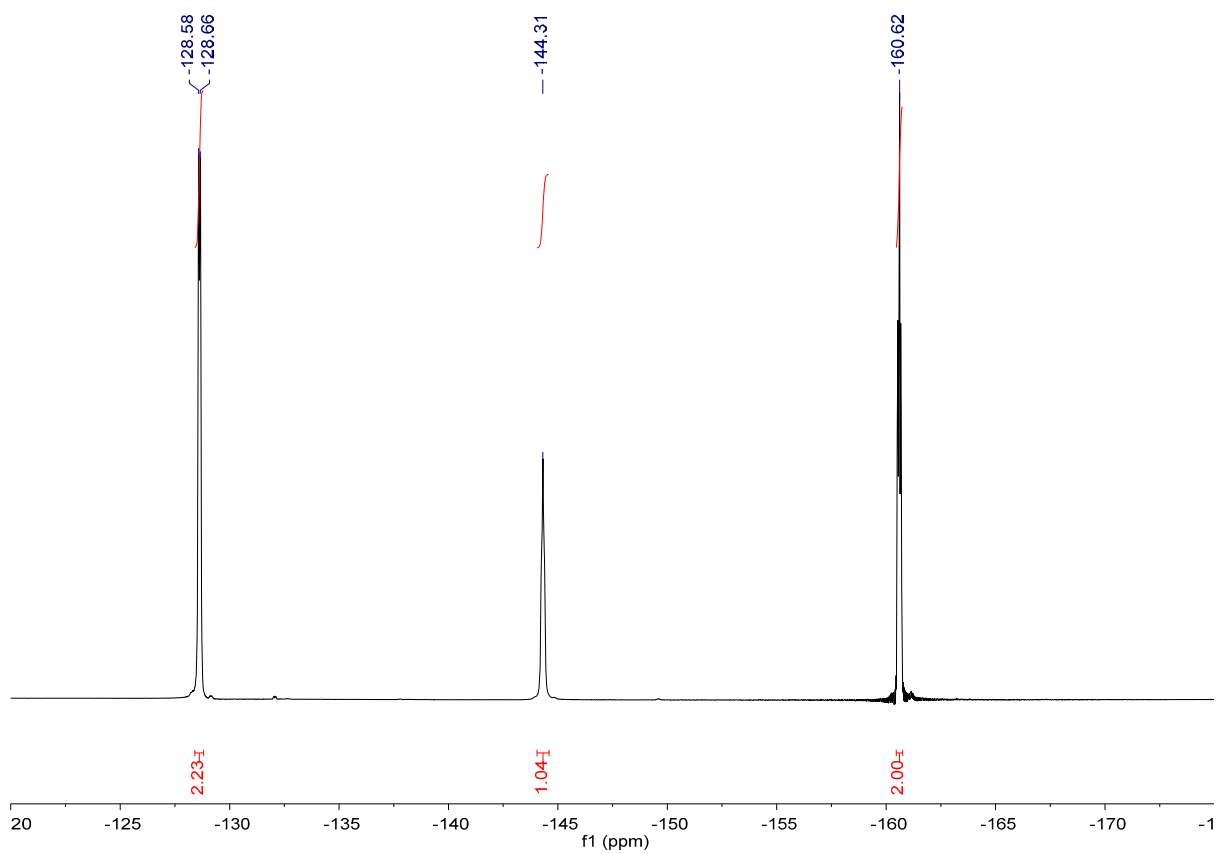
In situ ^1H -NMR (500 MHz, CDCl_3 , 298K) spectrum of excess $\text{B}(\text{C}_6\text{F}_5)_3$.



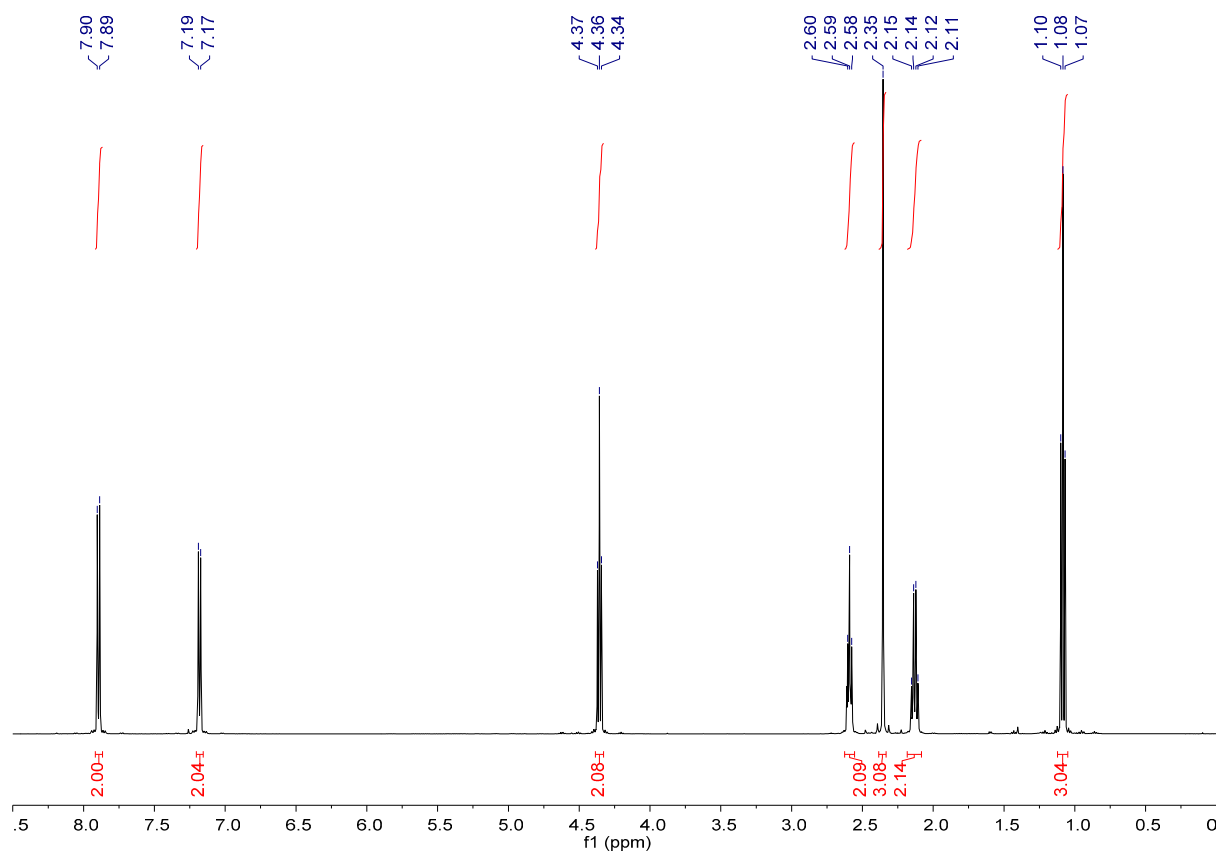
In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K) spectrum of excess $\text{B}(\text{C}_6\text{F}_5)_3$.



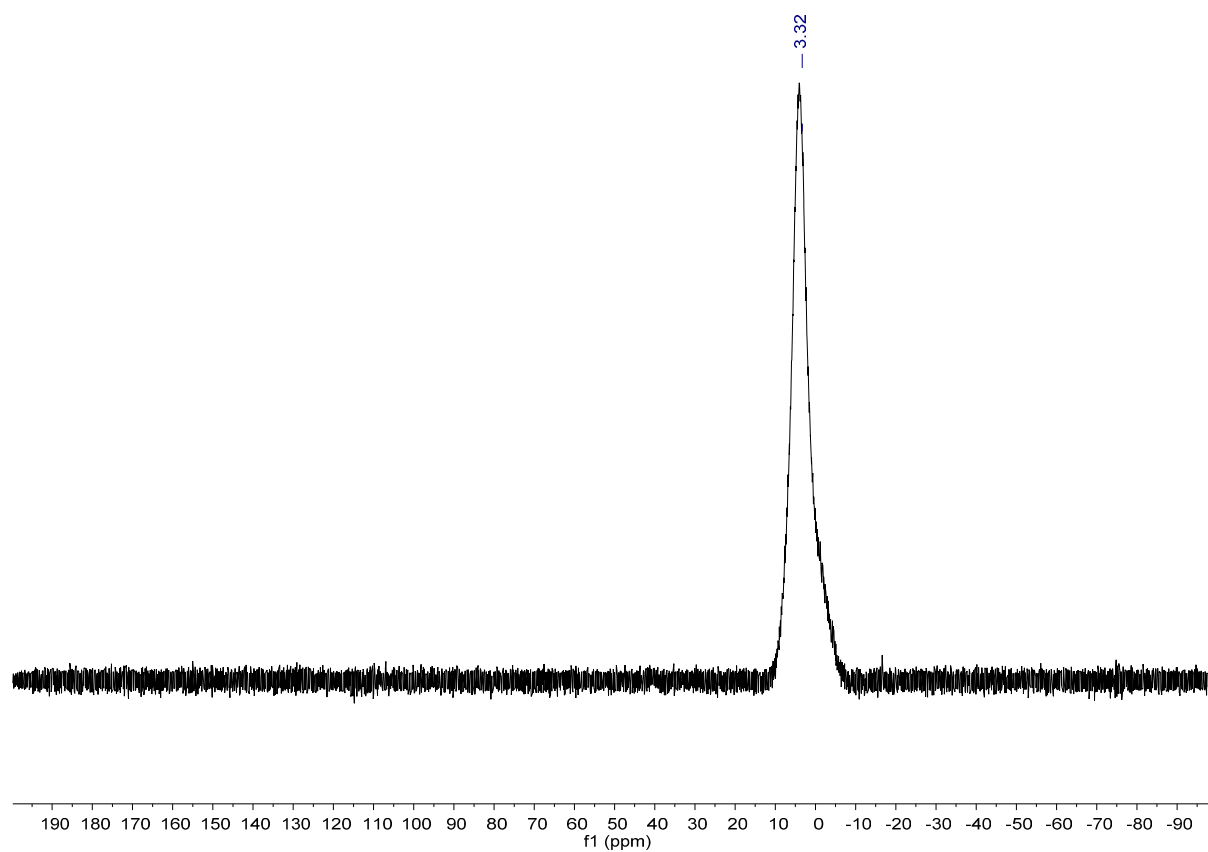
In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K) spectrum of excess $\text{B}(\text{C}_6\text{F}_5)_3$.



In situ ^1H -NMR (500 MHz, CDCl_3 , 298K) spectrum of excess **2b**.



In situ ^{11}B -NMR (160 MHz, CDCl_3 , 298 K) spectrum of excess **2b**.



In situ ^{19}F -NMR (283 MHz, CDCl_3 , 298 K) spectrum of excess **2b**.

