

ESI - New tetrabutylphosphonium organic ionic plastic crystals incorporating borate anions

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¹H, ¹³C{¹H}, ¹¹B, and ³¹P{¹H} NMR spectra of sodium and [P₄₄₄₄]⁺ salts of the bis(butane-1,4-dioxy)borate ([B(bdo)₂]⁻) and tetrakis(pyrazolyl)borate ([B(pyr)₄]⁻) anions.

Na[B(bdo)₂]

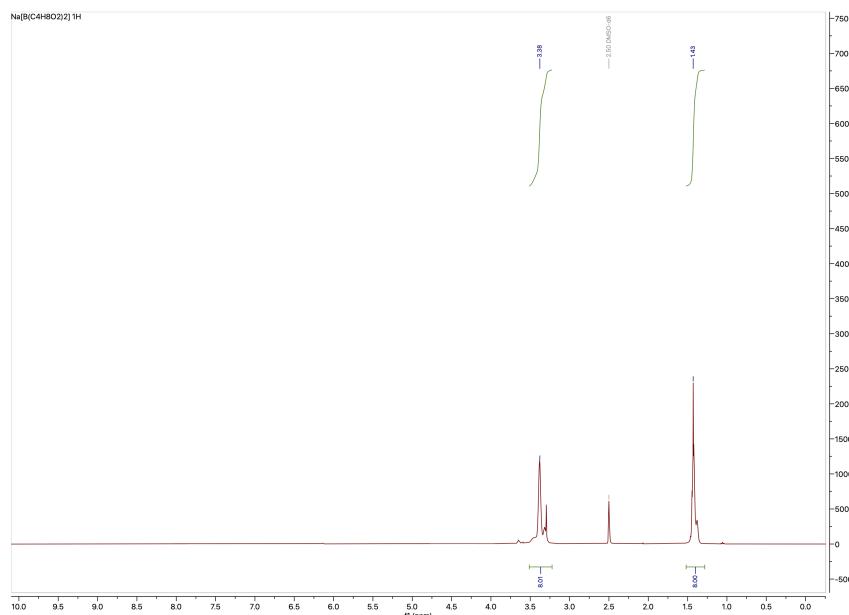


Figure S1 ¹H NMR spectrum of Na[B(bdo)₂] in DMSO-*d*₆

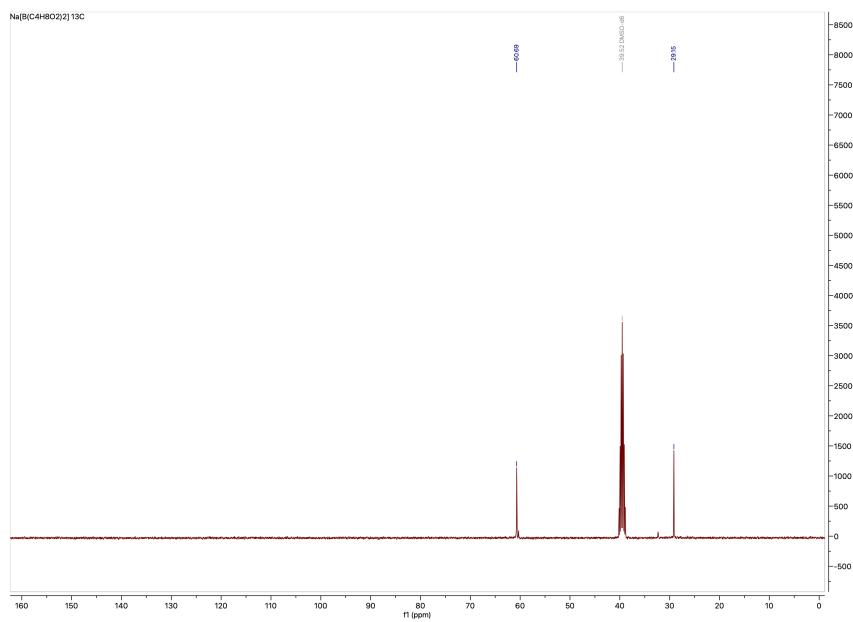


Figure S2 ¹³C{¹H} NMR spectrum of Na[B(bdo)₂] in DMSO-*d*₆

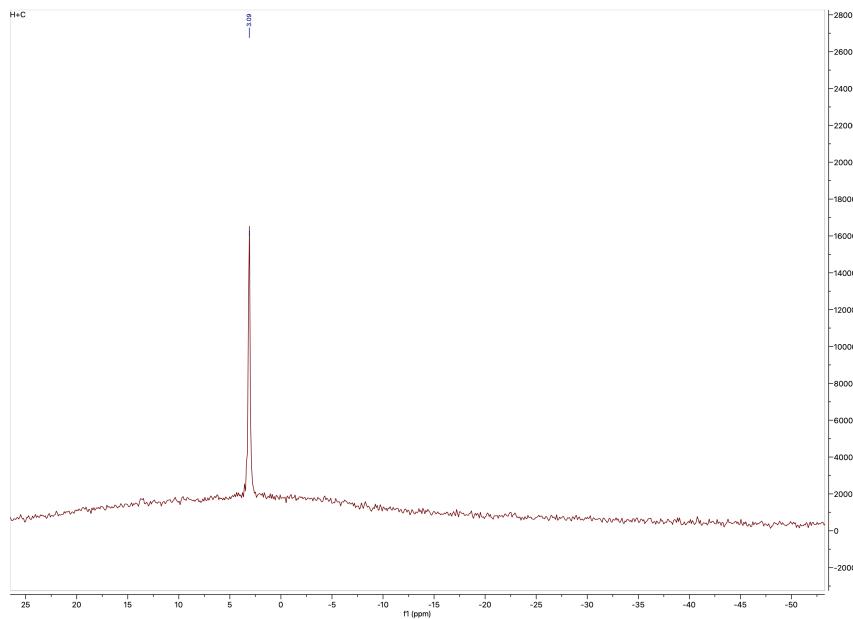


Figure S3 ¹¹B NMR spectrum of Na[B(bdo)₂] in DMSO-*d*₆

Na[B(pyr)₄]

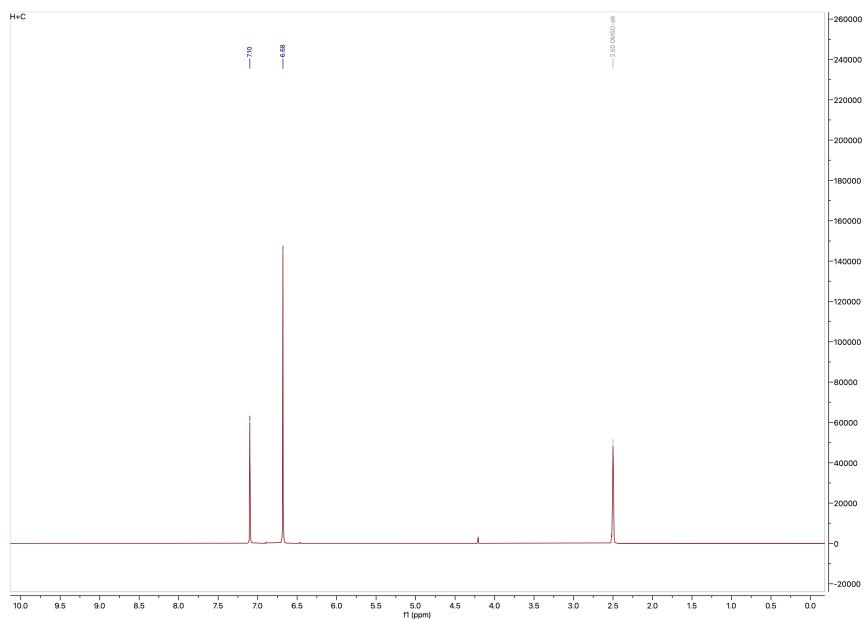


Figure S4 ¹H NMR spectrum of Na[B(pyr)₄] in DMSO- d_6

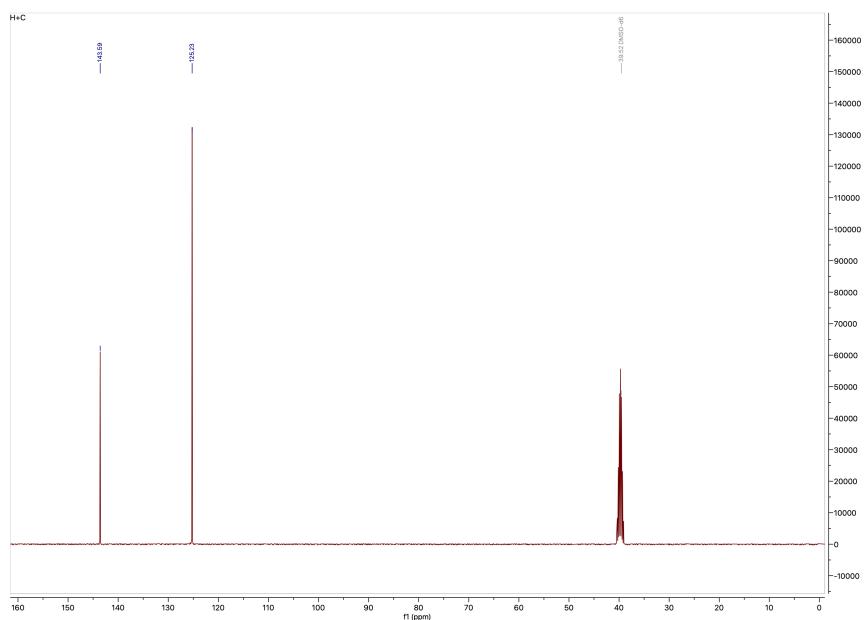


Figure S5 ¹³C{¹H} NMR spectrum of Na[B(pyr)₄] in DMSO- d_6

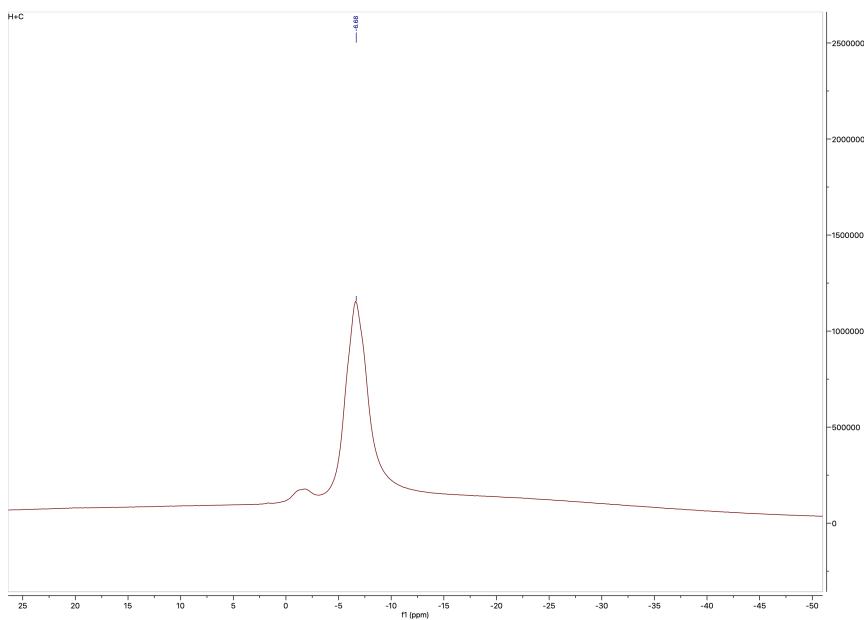


Figure S6 ^{11}B NMR spectrum of $\text{Na}[\text{B}(\text{pyr})_4]$ in $\text{DMSO}-d_6$

[P₄₄₄₄][B(bdo)₂]

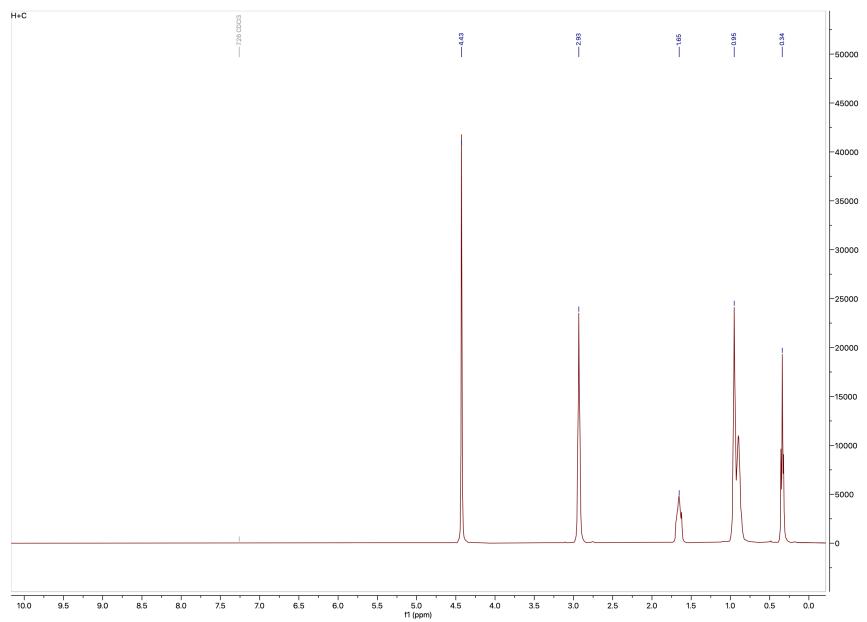


Figure S7 ^1H NMR spectrum of $[\text{P}_{4444}][\text{B}(\text{bdo})_2]$ in CDCl_3

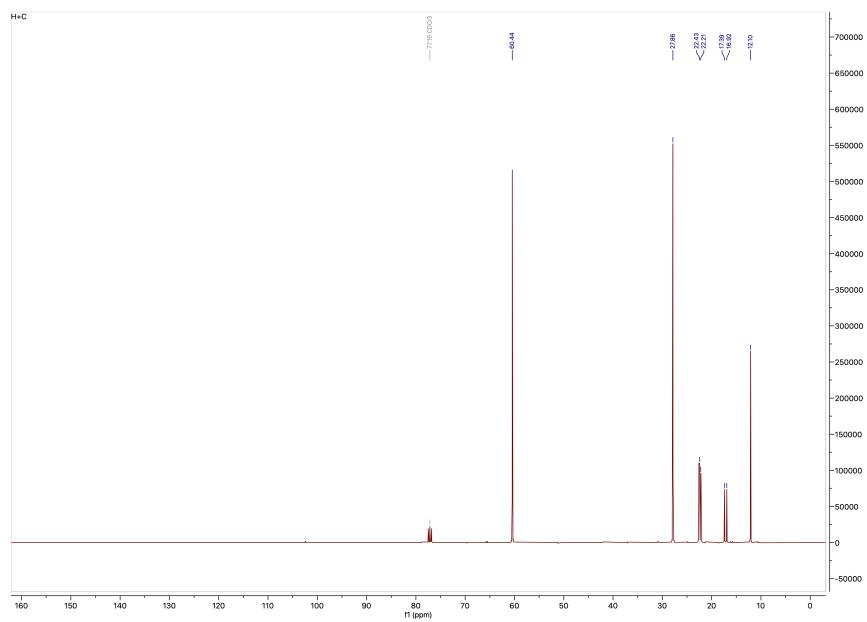


Figure S8 $^{13}\text{C}\{\text{H}\}$ NMR spectrum of $[\text{P}_{4444}][\text{B}(\text{bdo})_2]$ in CDCl_3

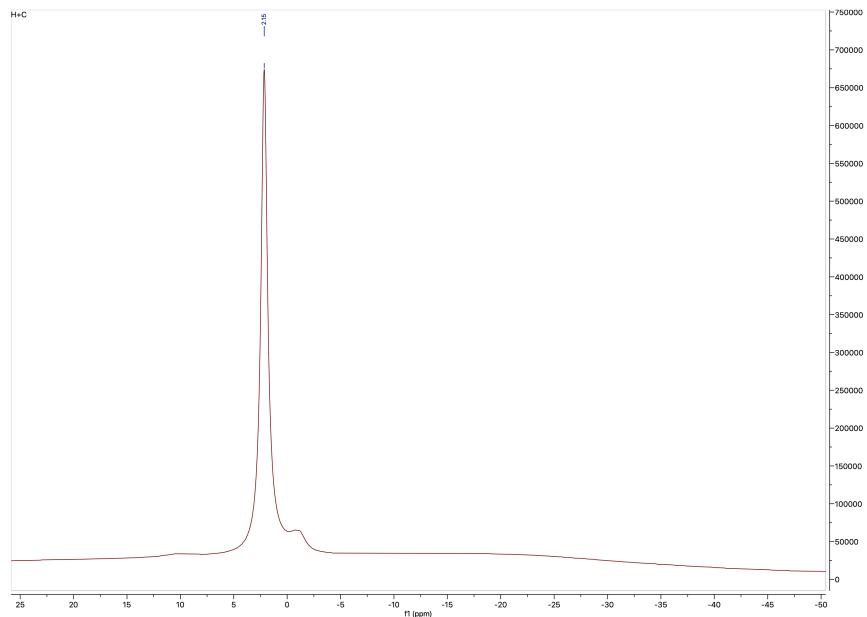


Figure S9 ^{11}B NMR spectrum of $[\text{P}_{4444}][\text{B}(\text{bdo})_2]$ in CDCl_3

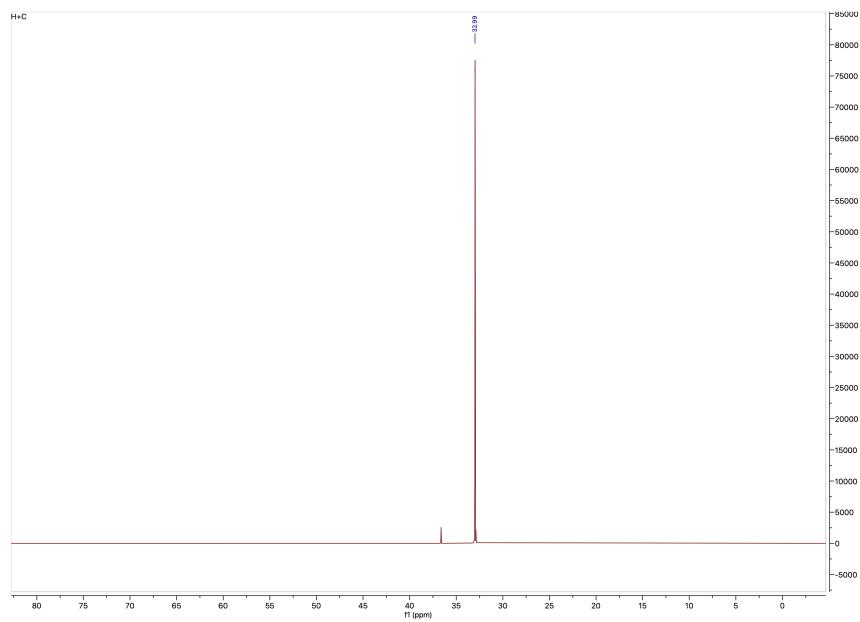


Figure S10 $^{31}\text{P}\{\text{H}\}$ NMR spectrum of $[\text{P}_{4444}]\text{B}(\text{bdo})_2$ in CDCl_3

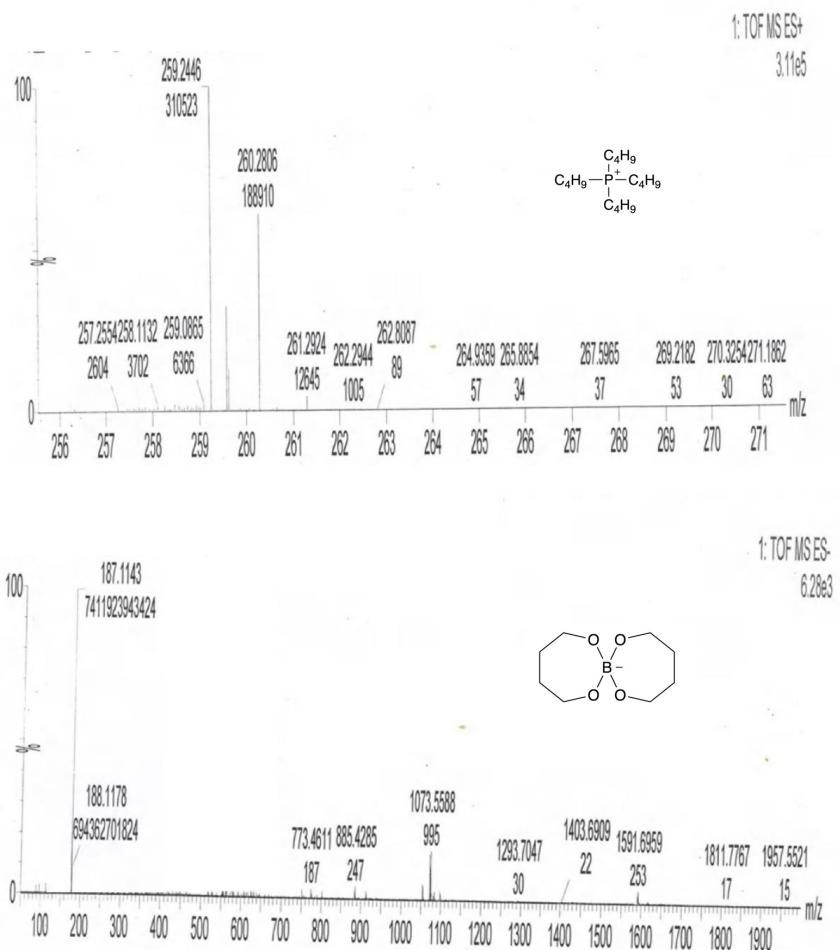


Figure S11 ESI-MS of $[P_{4444}][B(bdo)_2]$

[P₄₄₄₄][B(pyr)₄]

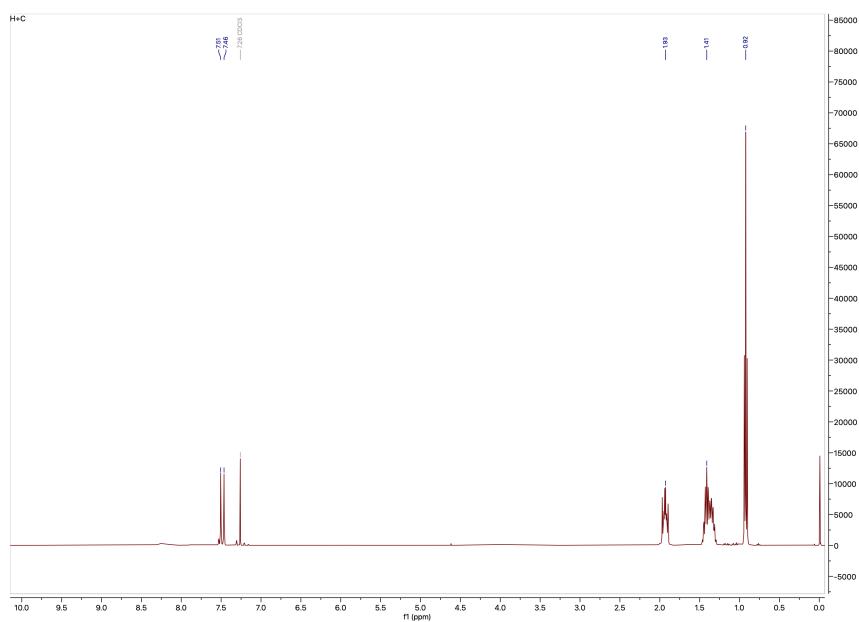


Figure S12 ¹H NMR spectrum of [P₄₄₄₄][B(pyr)₄] in CDCl₃

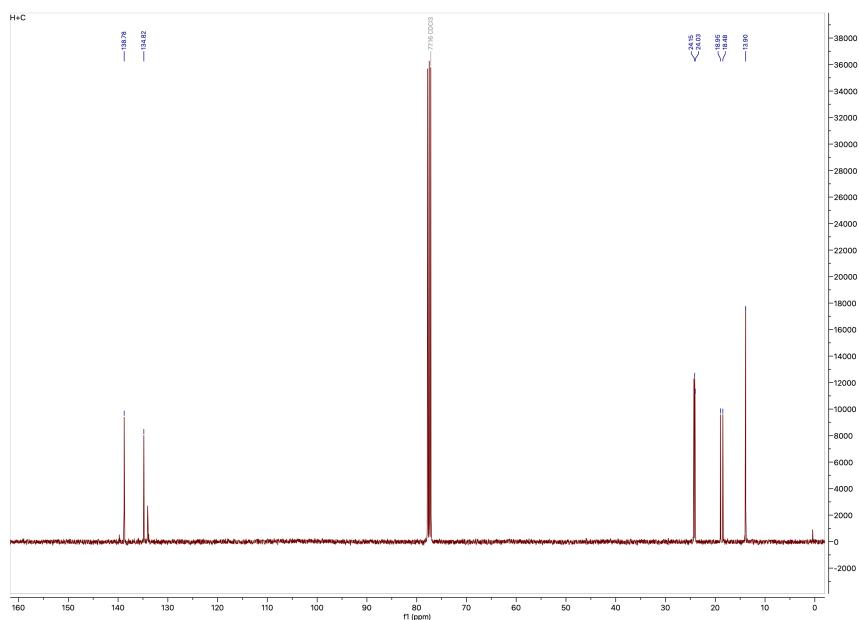


Figure S13 ¹³C{¹H} NMR spectrum of [P₄₄₄₄][B(pyr)₄] in CDCl₃

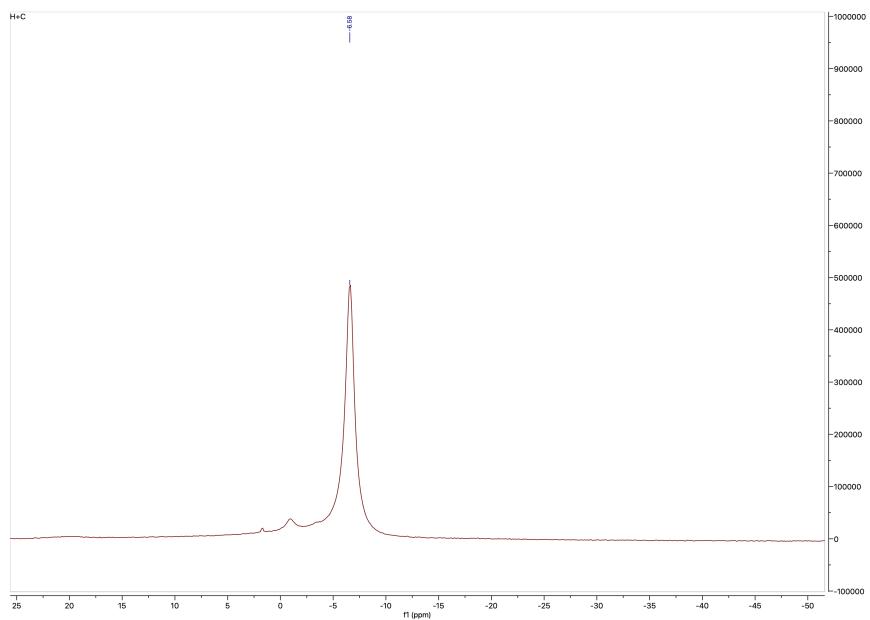


Figure S14 ^{11}B NMR spectrum of $[\text{P}_{4444}][\text{B}(\text{pyr})_4]$ in CDCl_3

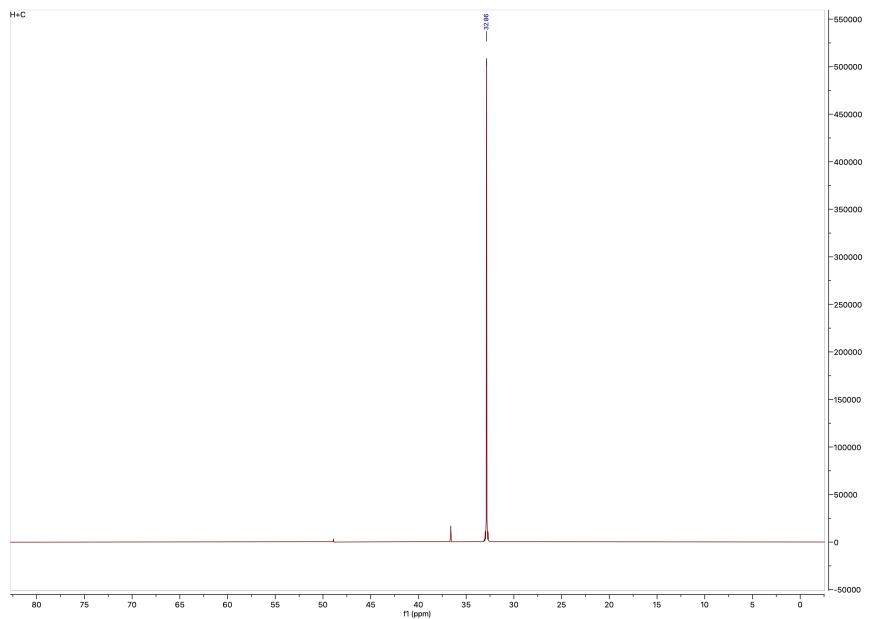


Figure S15 $^{31}\text{P}\{\text{H}\}$ NMR spectrum of $[\text{P}_{4444}][\text{B}(\text{pyr})_4]$ in CDCl_3

