

Electronic Supporting Information

Asymmetric molecular modification of viologens for highly stable electrochromic devices

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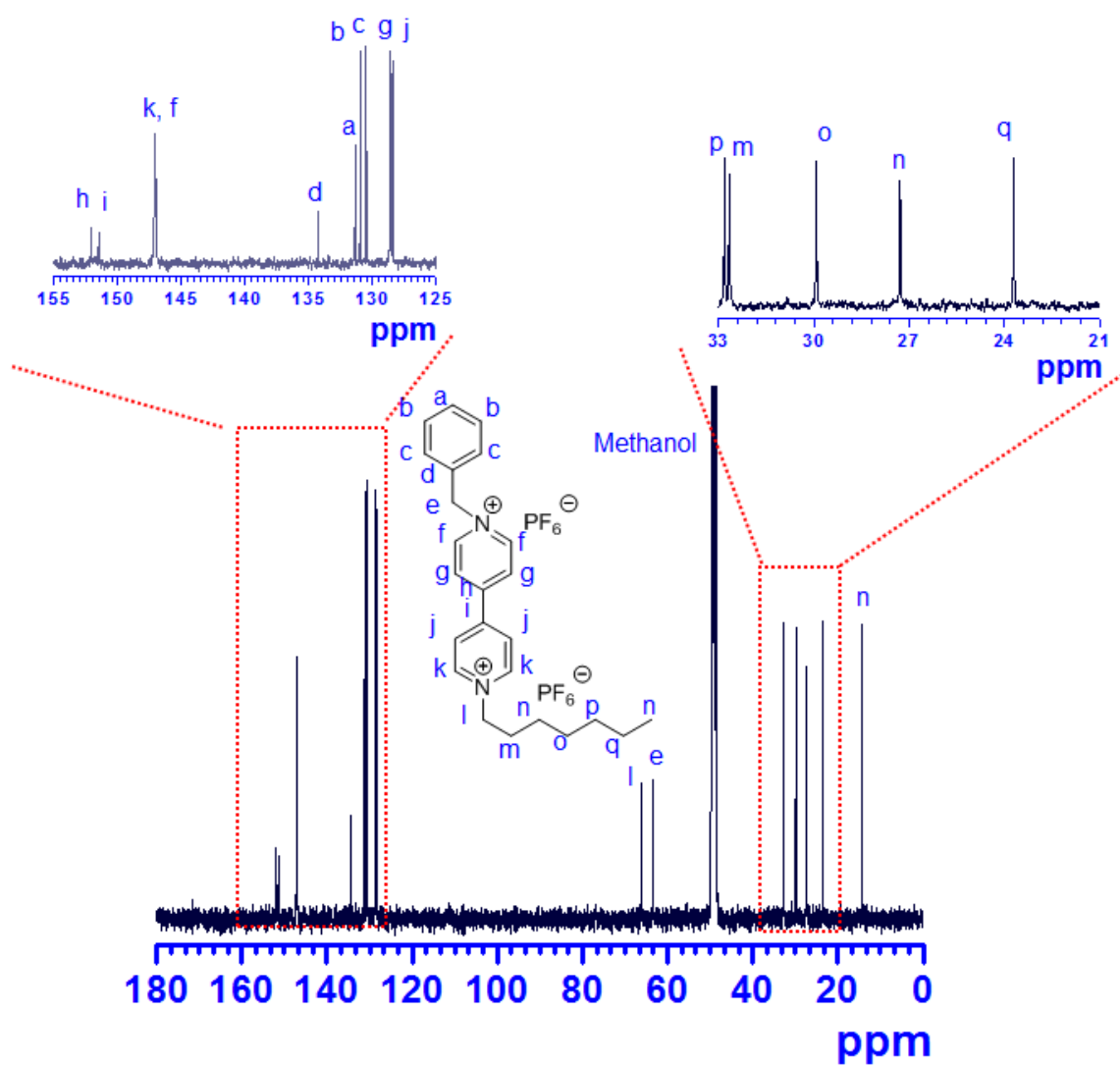


Fig. S1 ^{13}C NMR spectrum of $\text{BHV}(\text{PF}_6)_2$, supporting successful synthesis of BHV^{2+} .

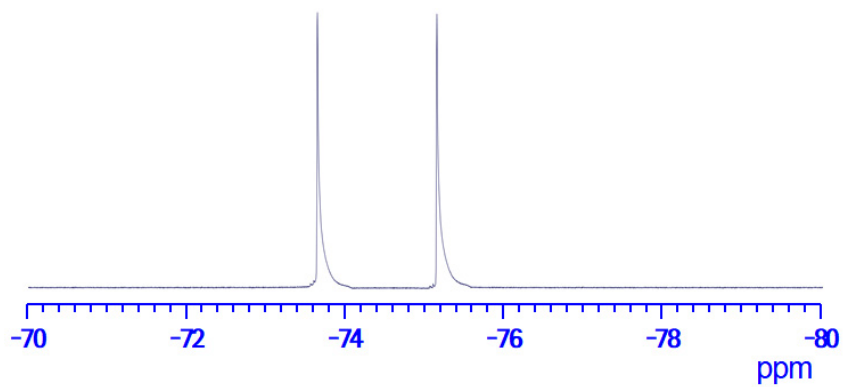


Fig. S2. ^{19}F NMR spectrum of $\text{BHV}(\text{PF}_6)_2$, indicating successful anion exchange reaction to involve hexafluorophosphates.

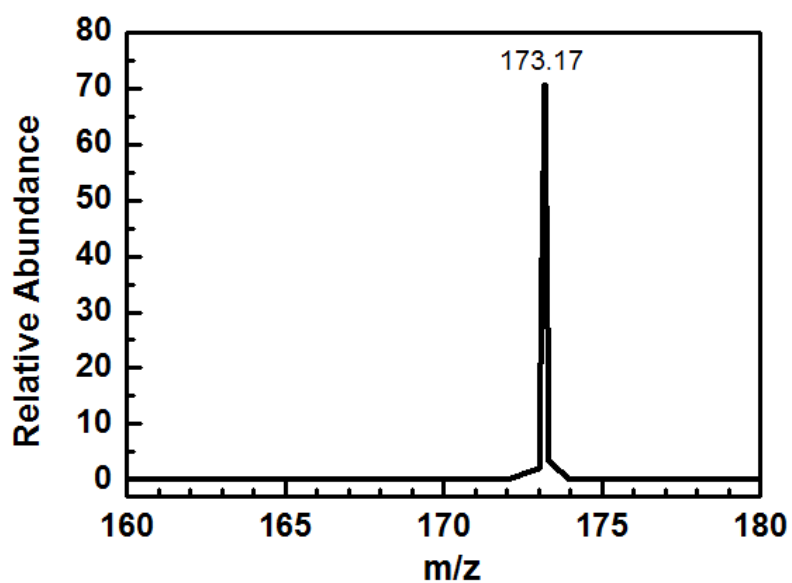


Fig. S3. Electrospray ionization mass spectroscopy (ESI-MS) spectrum of BHV^{2+} . Considering $z = 2$ for BHV^{2+} , m value is found to be 346.34 (calculated for 346.51).

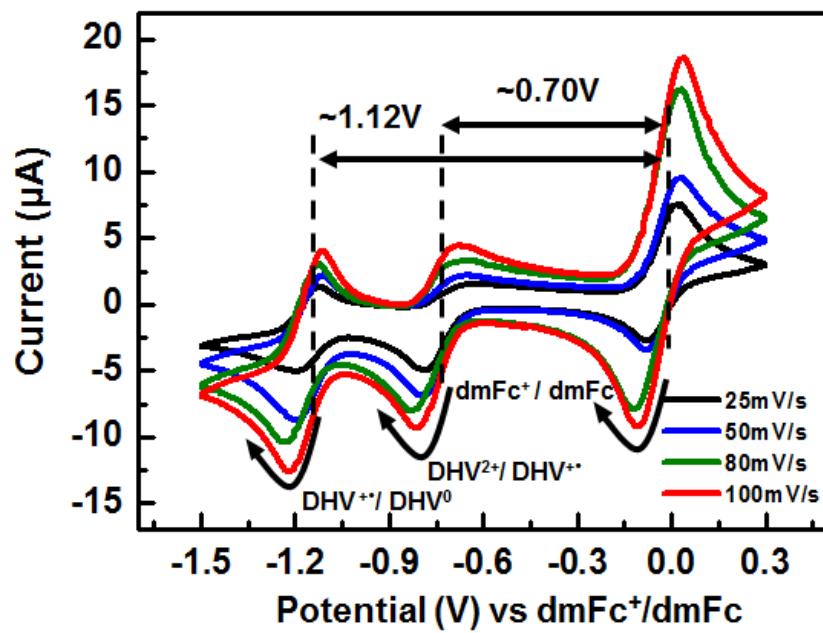


Fig. S4. Cyclic voltammograms of DHV²⁺-containing EC system with [BMI][BF₄].