Supplementary Materials for

Polytriphenylamine Composites for Energy Storage Electrodes: Effect of Pendant vs. Backbone Polymer Architecture of Electroactive Group

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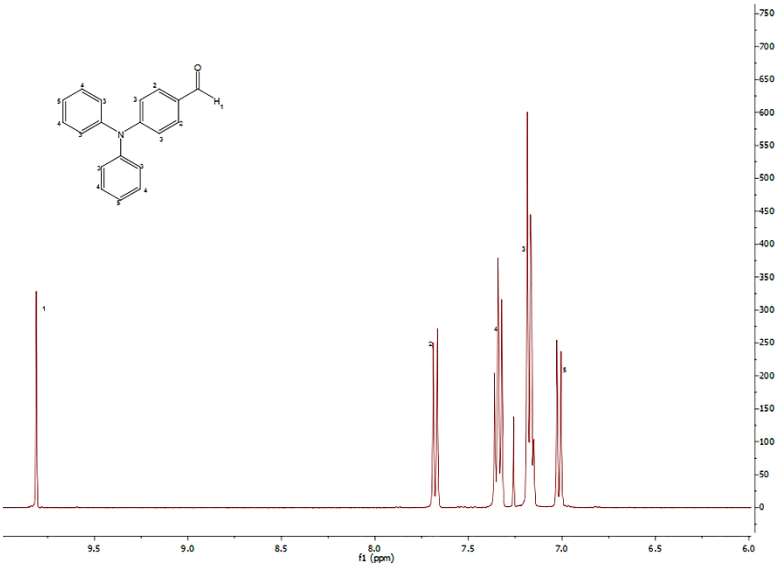
H NMR TPA-CHO



^{13}C NMR TPA-CHO

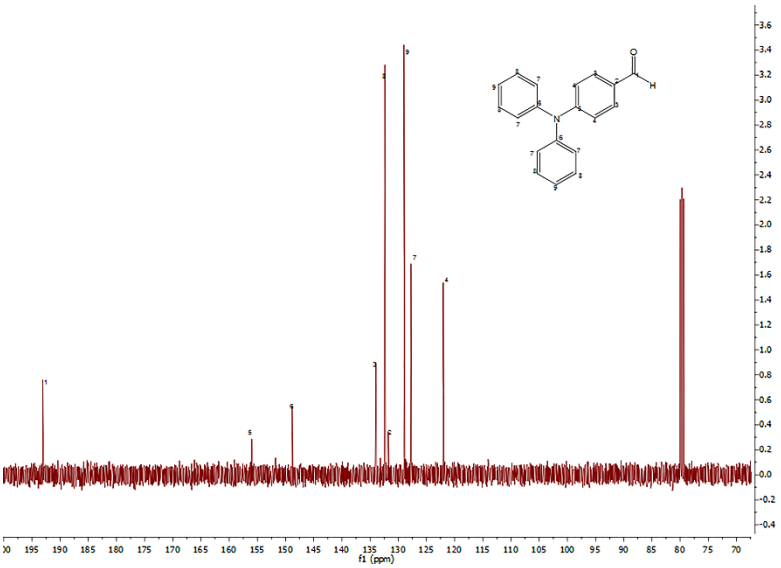
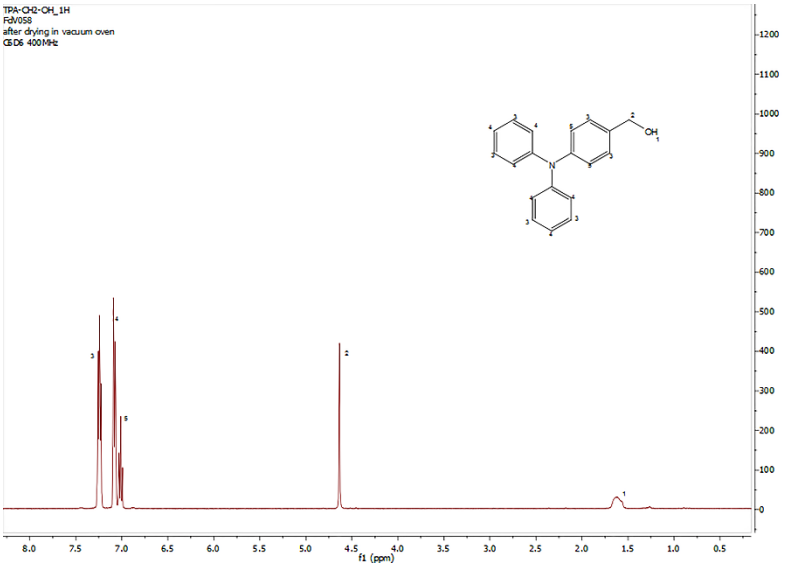


Figure S1. H NMR (top) and ^{13}C NMR of TPA-CHO (bottom)

H NMR TPA-CH_2OH



^{13}C NMR TPA-CH_2OH

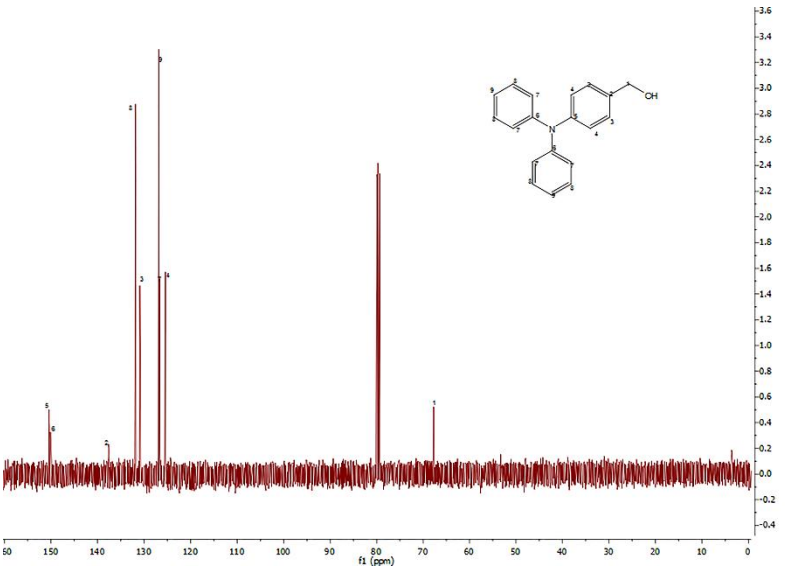
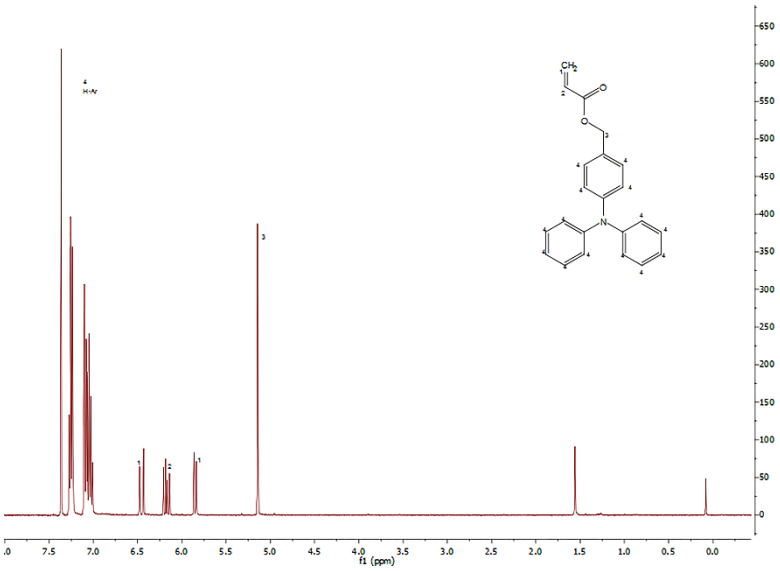


Figure S2. H NMR (top) and ^{13}C NMR of TPA-CH_2OH (bottom)

H NMR TPAA



^{13}C NMR TPAA

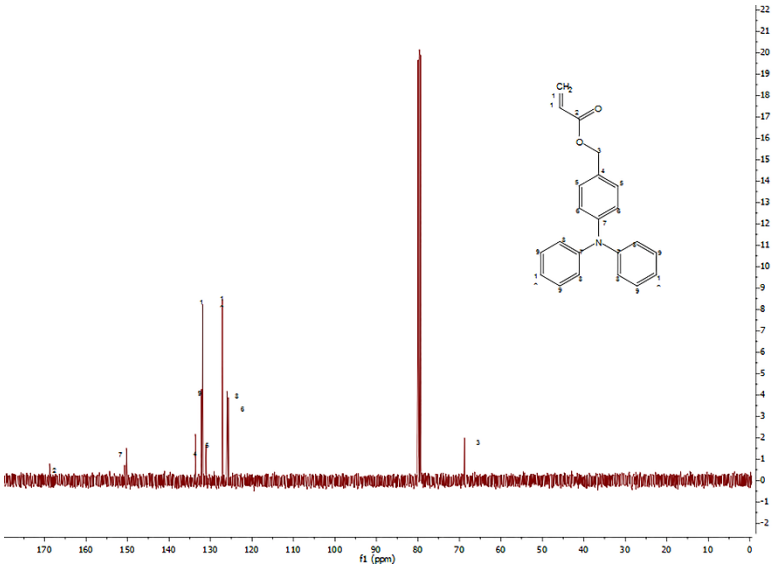
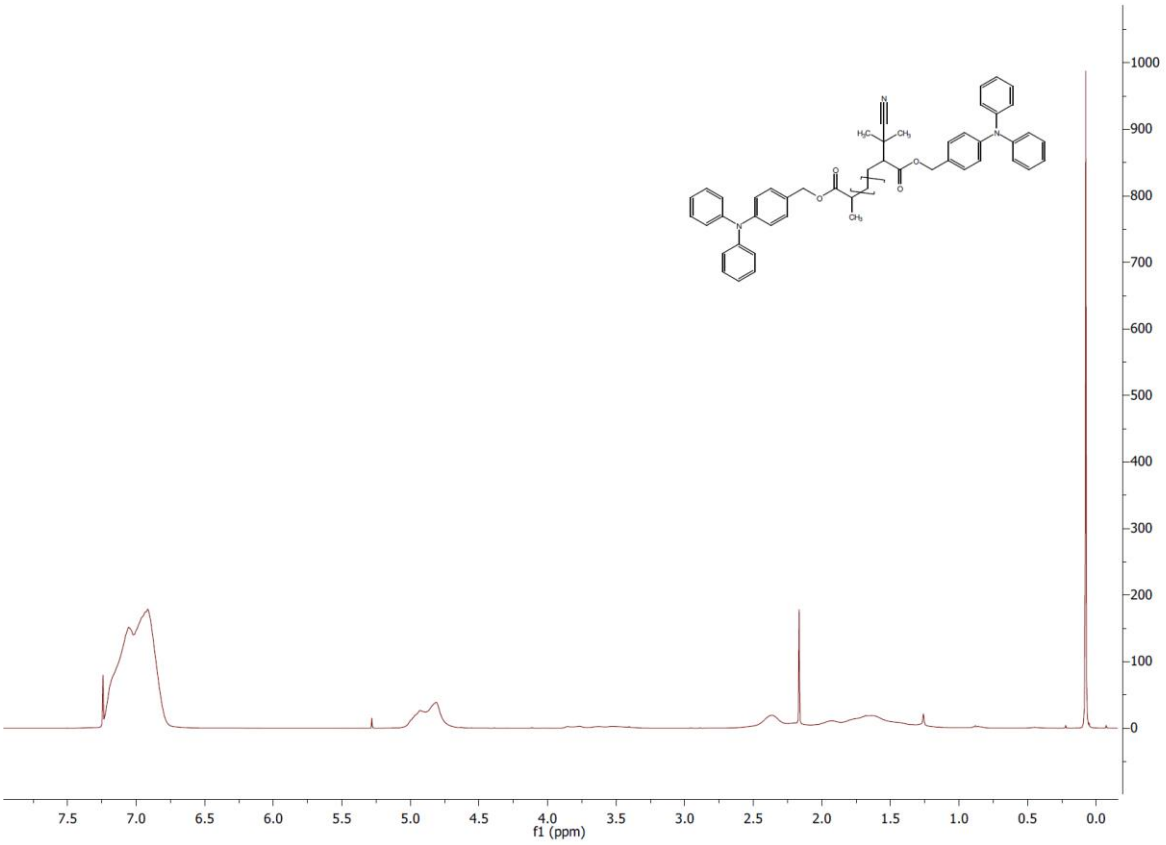


Figure S3. H NMR (top) and ^{13}C NMR of TPAA

H NMR P(TPAA)



^{13}C NMR P(TPAA)

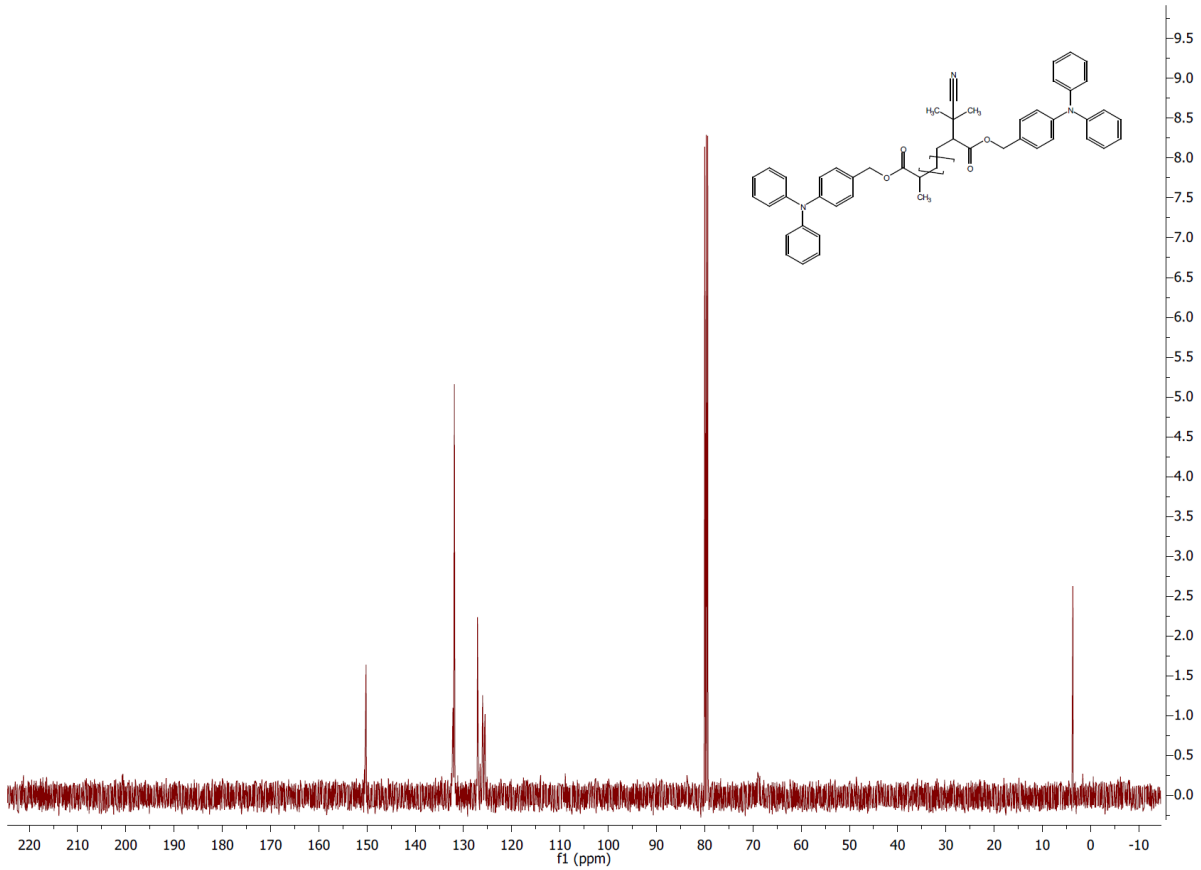


Figure S4. H NMR (top) and ^{13}C NMR of P(TPAA)

DEPT P(TPAA)

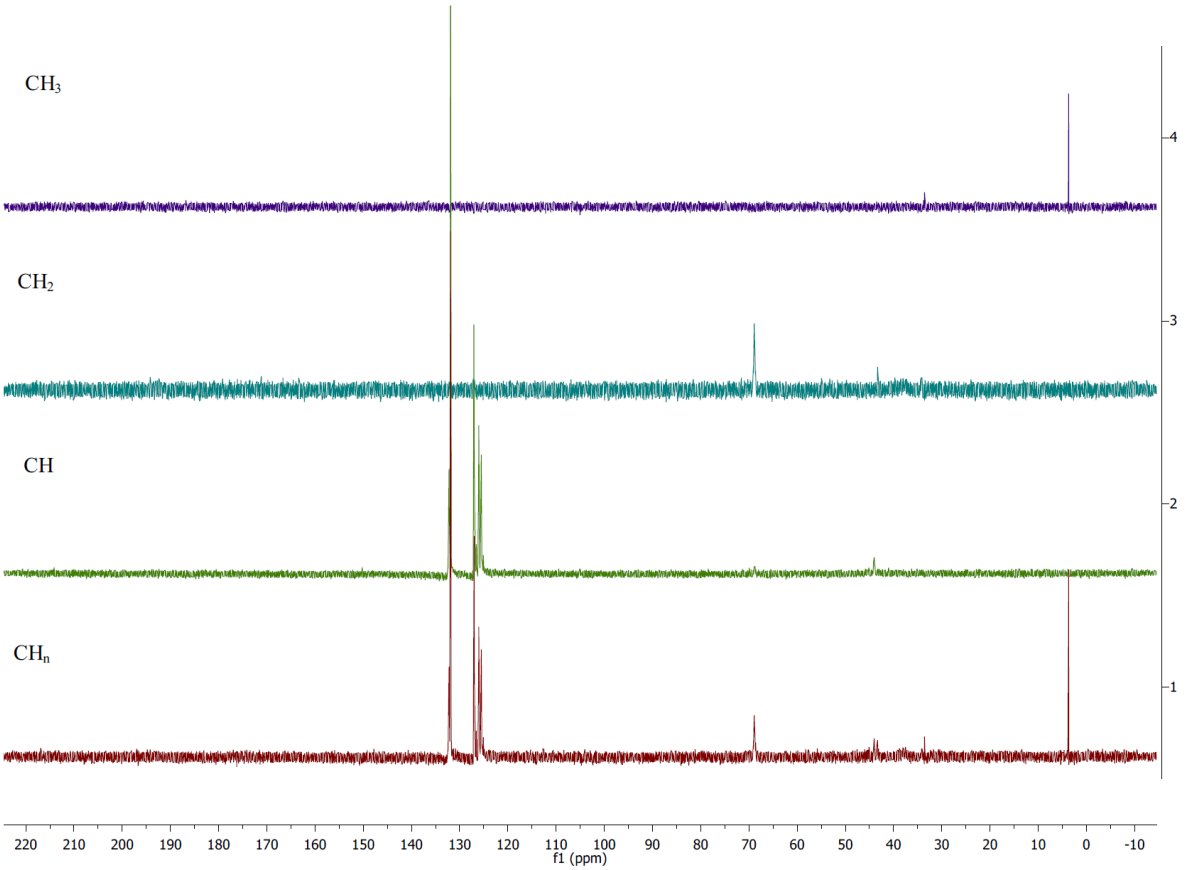
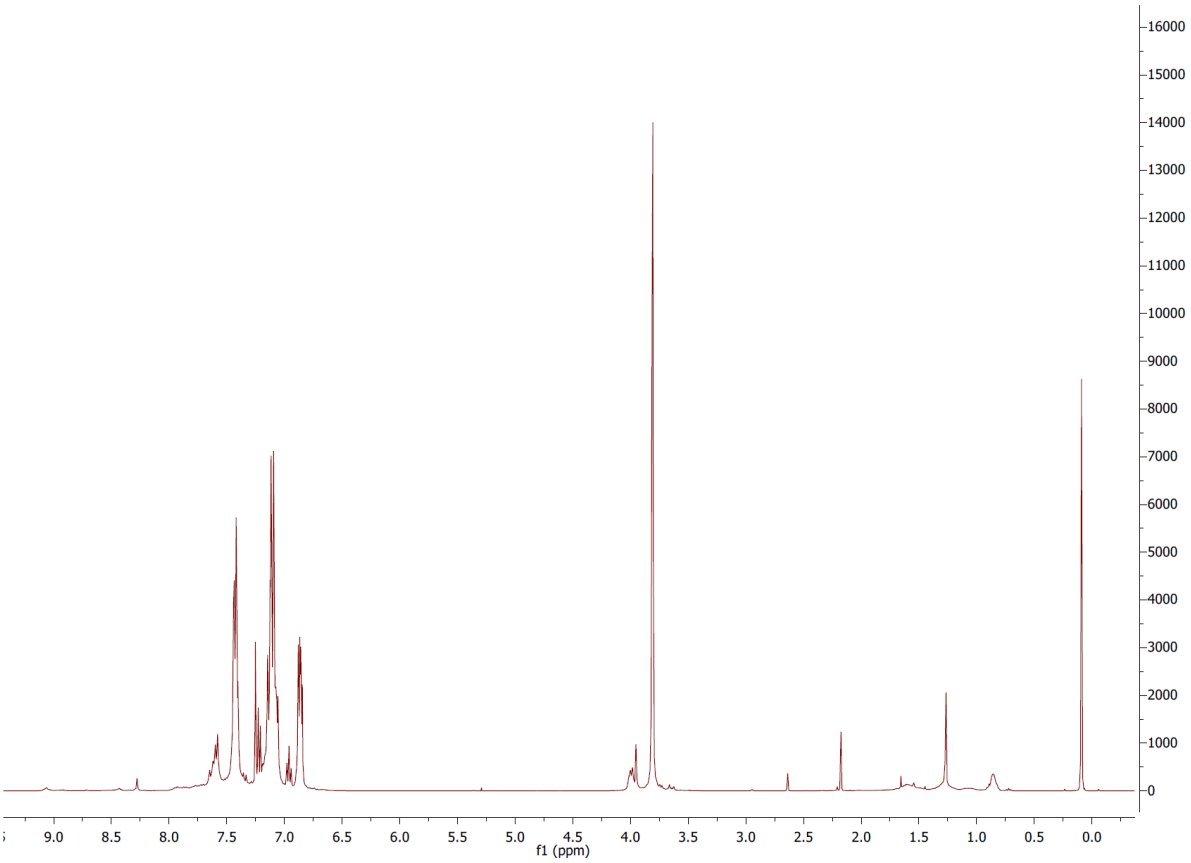


Figure S5. DEPT spectrum of P (TPAA)

H NMR P(TPA-Me)



^{13}C NMR P(TPA-Me)

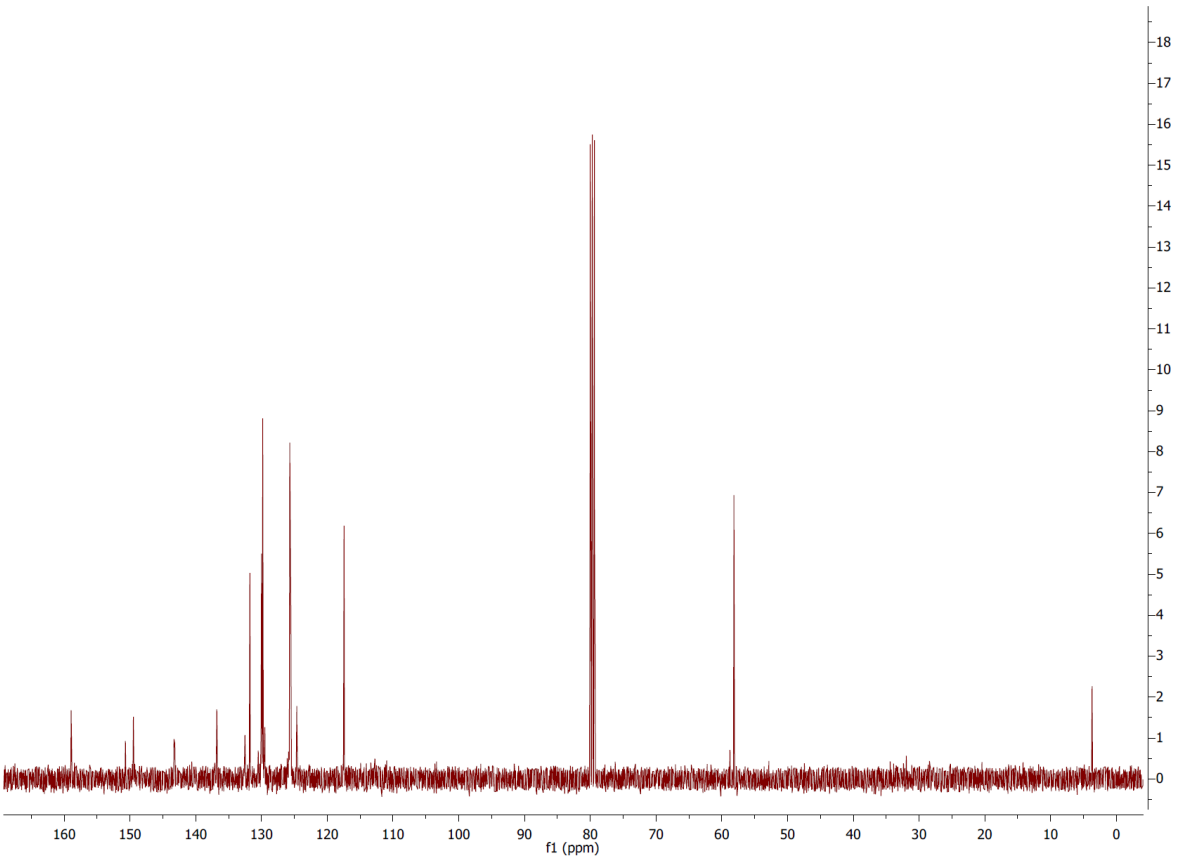


Figure S6. H NMR (top) and ^{13}C NMR of P(TPA-Me)

DEPT P(TPA-Me)

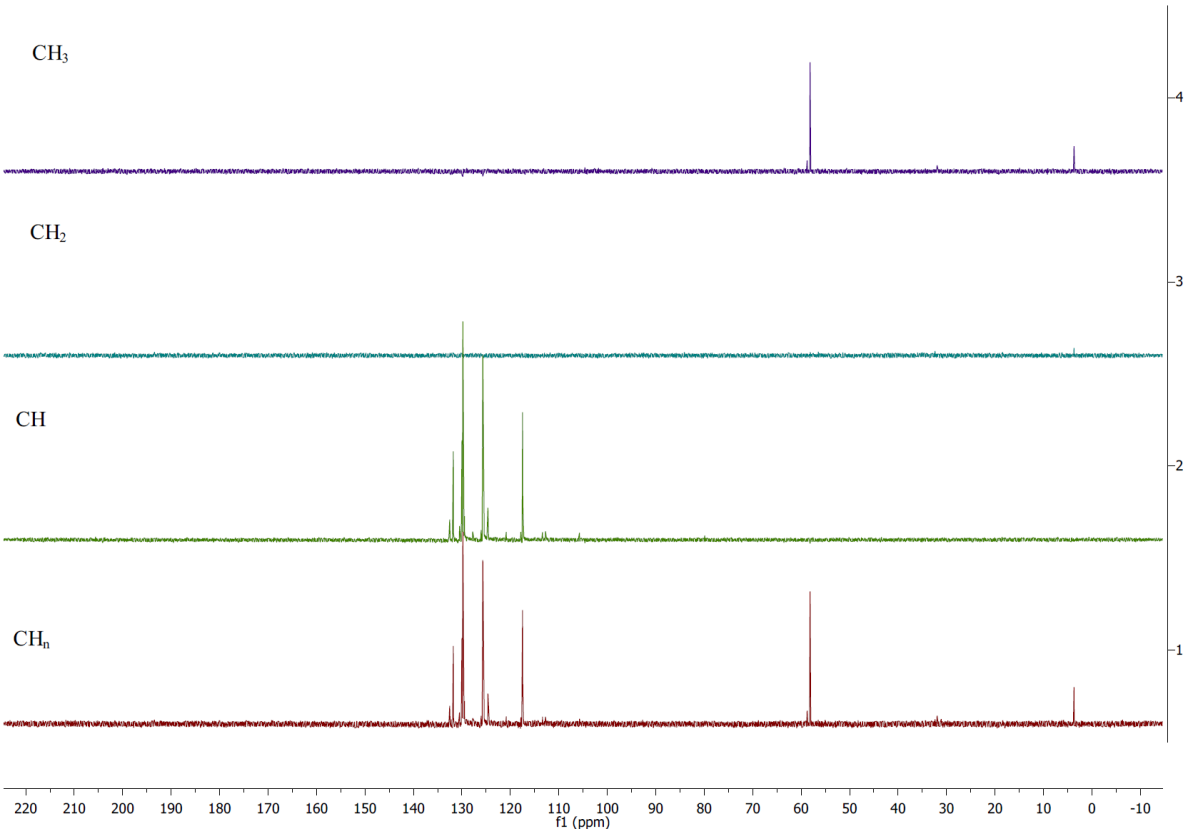


Figure S7. DEPT spectrum of P(TPA-Me)

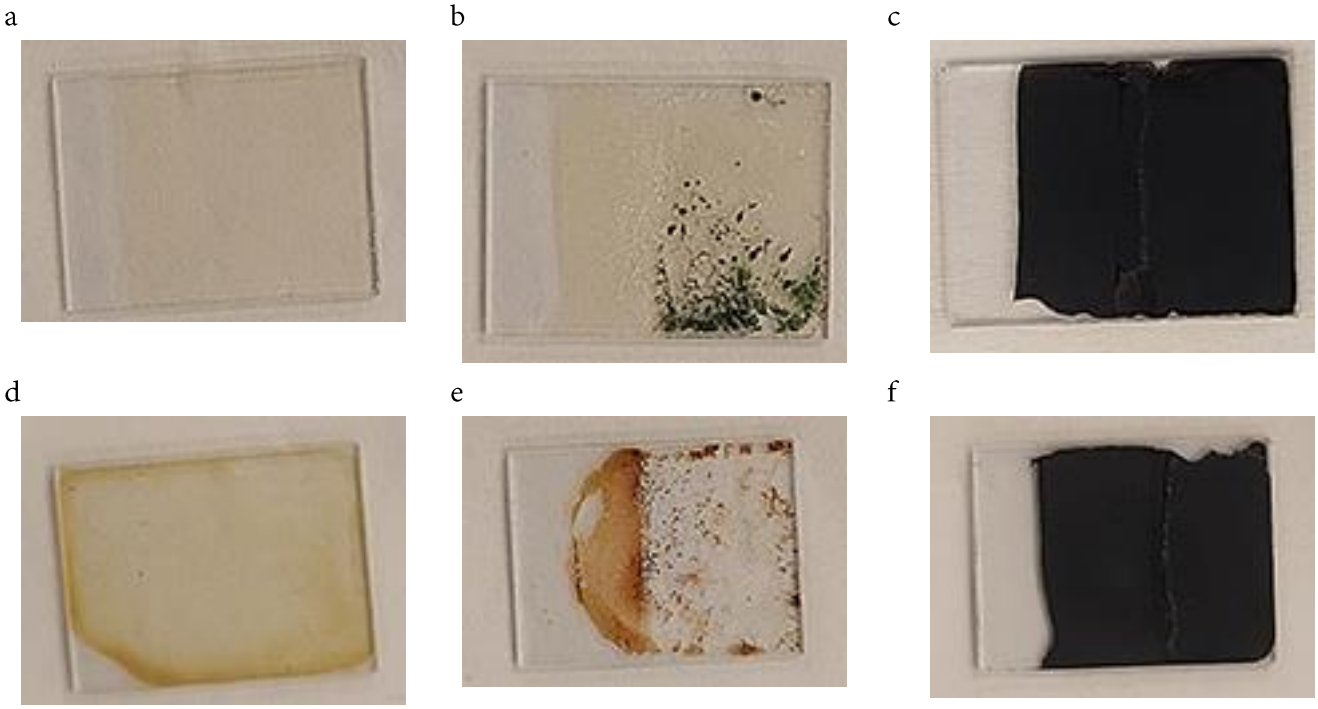
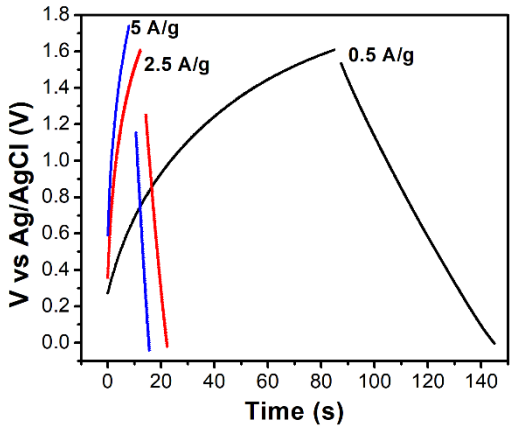


Figure S8. (a) rP before CV, (b) rP after 10 CV cycles (c) rC after 100 CV cycles, (d) cP before CV, (e) cP after 10 CV cycles, (f) cC after 100 CV cycles



igure S9. Charge-discharge curves for neat CNT films

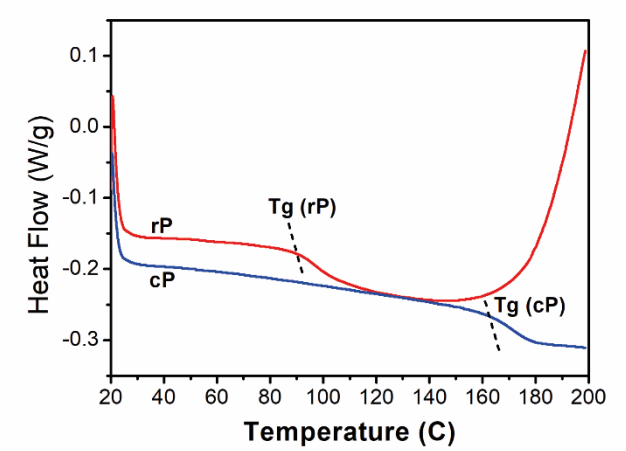


Figure S10. DSC curves for rP and cP indicating the higher glass transition temperature of cP compared to rP (approximately two folds)

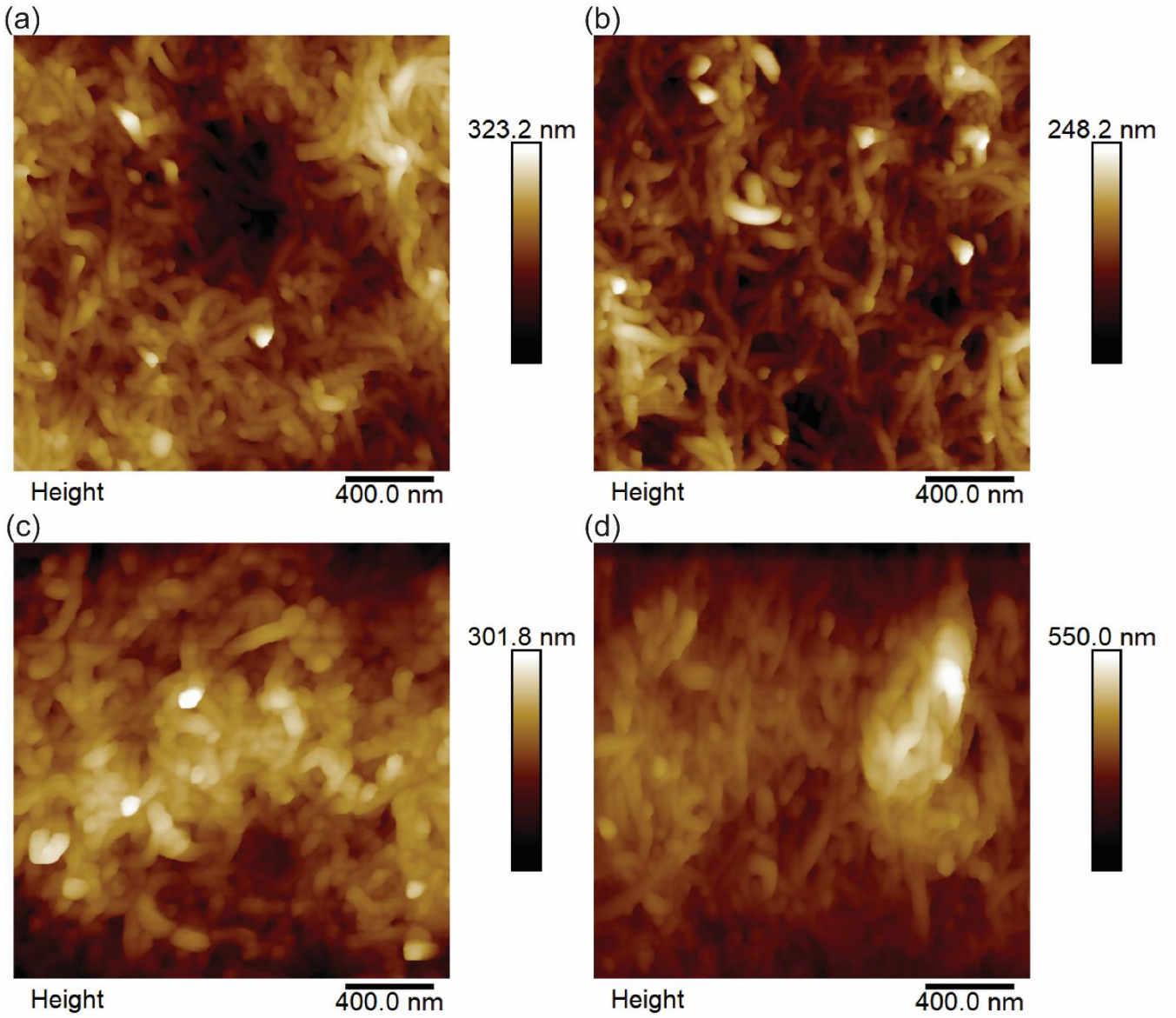


Figure S11. AFM scans of the electrochemically aged rC for (a) 100 cycles, (b) 1000 cycles; the scans of the electrochemically aged cC for (a) 100 cycles, (b) 1000 cycles of charge-discharge at 5 Ag^{-1}