Supporting Information for

Polymerization of 1-Chloro-2-benzaldehyde-acetylene Using NHC-Pd/AgOTf Catalyst and the Post-Polymerization Modification

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Contents

^{1}H NMR spectrum and high resolution mass spectrum of 1-trimethylsilanyl-2-(4-tert-butyl) phenylacetylene.....S2
^{1}H, ^{13}C NMR spectra and high resolution mass spectrum of M**1**.....S3
^{1}H spectrum of 1-trimethylsilanyl-2-(4-formyl)-phenylacetylene.....S4
^{1}H NMR spectrum and high resolution mass spectrum of 1-trimethylsilanyl-2-(4-ethylone)-phenylacetylene.....S5
^{13}C NMR spectrum and high resolution mass spectrum of M**3**.....S6
^{1}H NMR spectrum of 1-trimethylsilanyl-2-(4-cyano)-phenylacetylene, ^{1}H NMR and ^{13}C spectra of M**4**.....S7
^{1}H NMR spectrum of 1-trimethylsilanyl-2-(4-nitro)-phenylacetylene, ^{1}H and ^{13}C NMR spectra of M**5**.....S8
FTIR spectra of M**4** and the possible polymer product of P**4**, ^{1}H NMR spectra of P**1** and P**2**.....S9
^{1}H spectrum for P**4** and P**5**.....S10

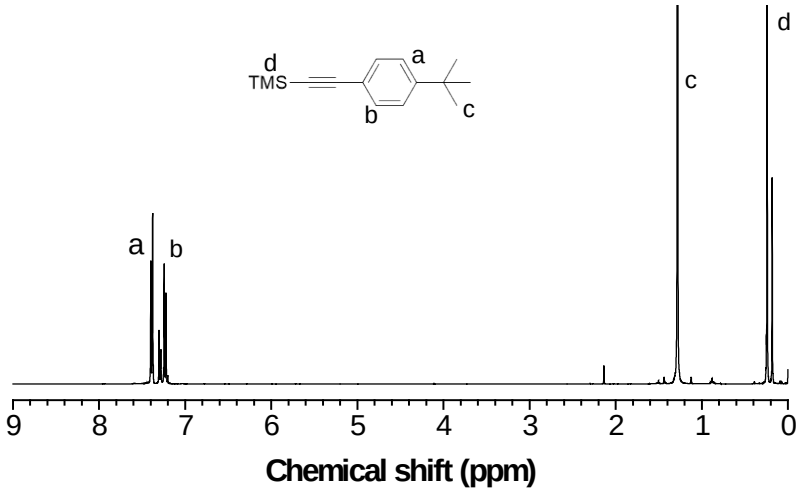

Figure S1. ^{1}H NMR spectrum of 1-trimethylsilanyl-2-(4-tert-butyl)-phenylacetylene in $CDCl_3$.

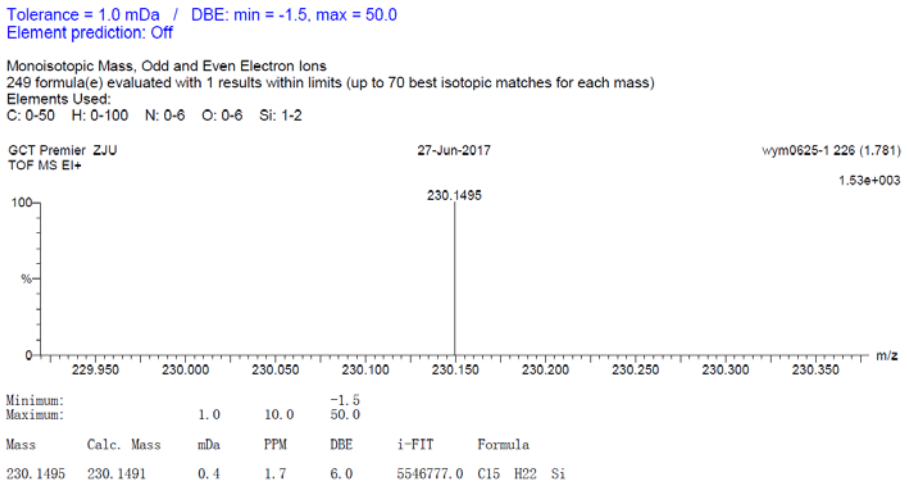

Figure S2. High resolution mass spectrum of 1-trimethylsilanyl-2-(4-tert-butyl)-phenylacetylene.

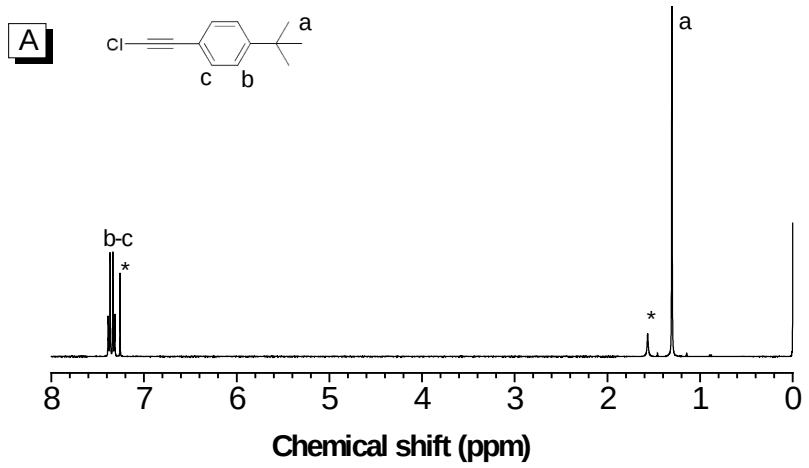

Figure S3. ^{1}H NMR spectrum of M**1** in $CDCl_3$.

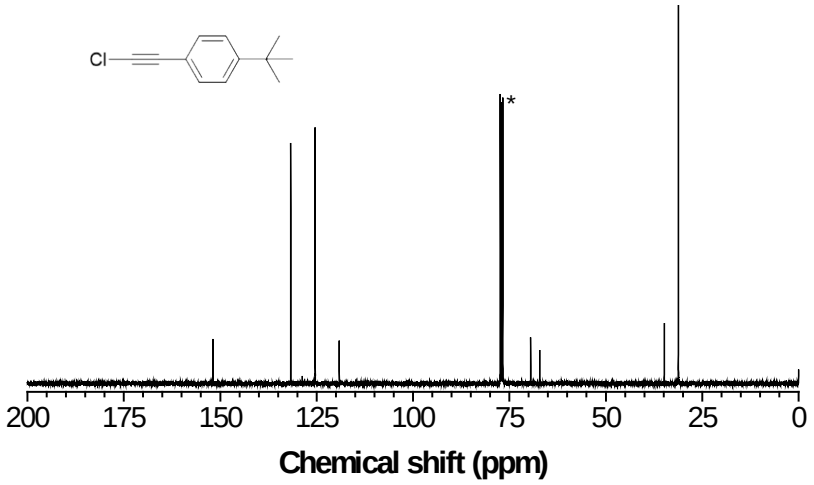

Figure S4. ^{13}C NMR spectrum of M**1** in $CDCl_3$.

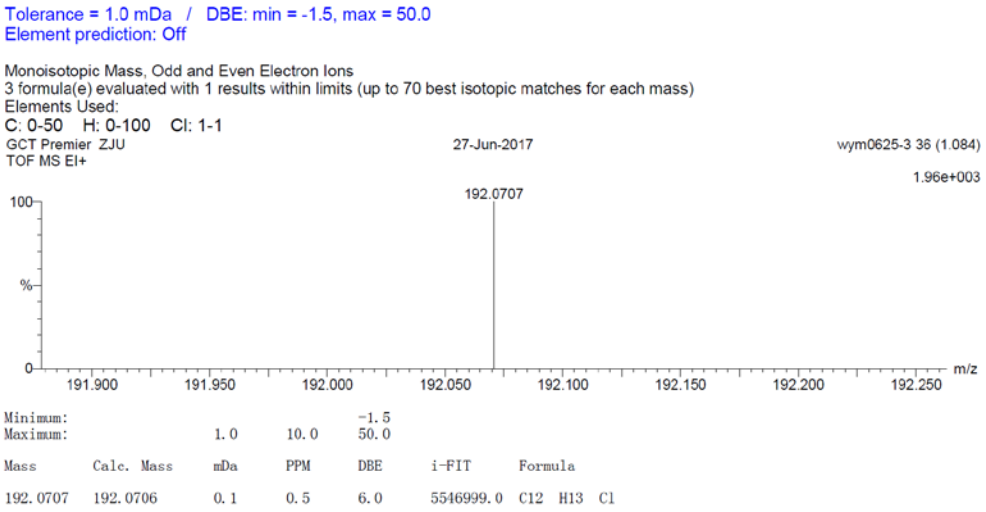

Figure S5. High resolution mass spectrum of M**1**.

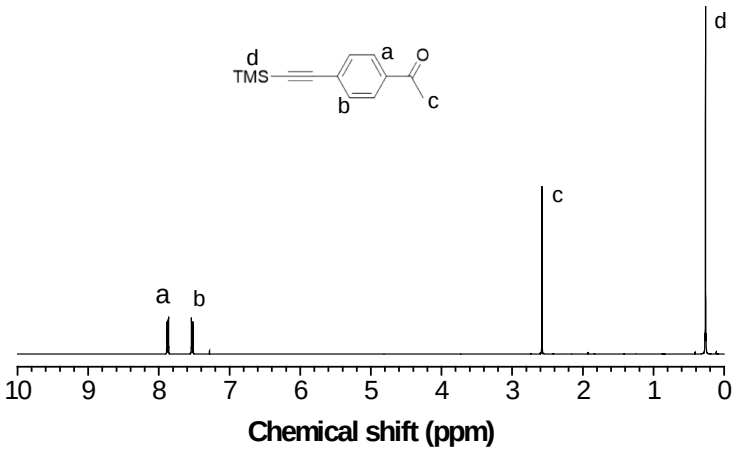

Figure S6. ^{1}H NMR spectrum of 1-trimethylsilanyl-2-(4-ethylone)-phenylacetylene in $CDCl_3$.

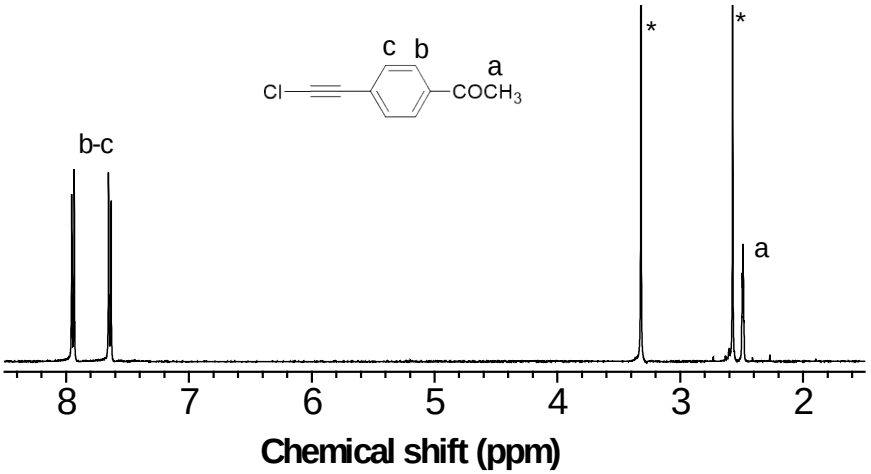

Figure S7. ^{1}H NMR spectrum of M**2** in DMSO-*d*6.

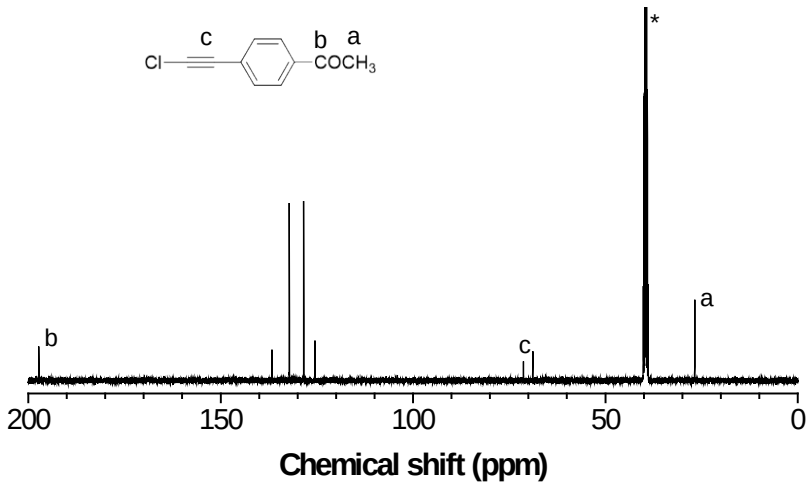

Figure S8. ^{13}C NMR spectrum of M**2** in $CDCl_3$.

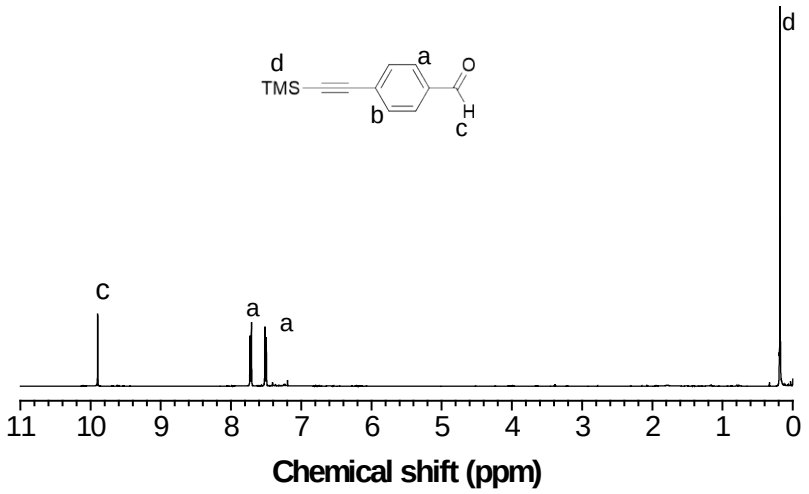

Figure S9. ^{1}H NMR spectrum of 1-trimethylsilanyl-2-(4-formyl)-phenylacetylene in $CDCl_3$.

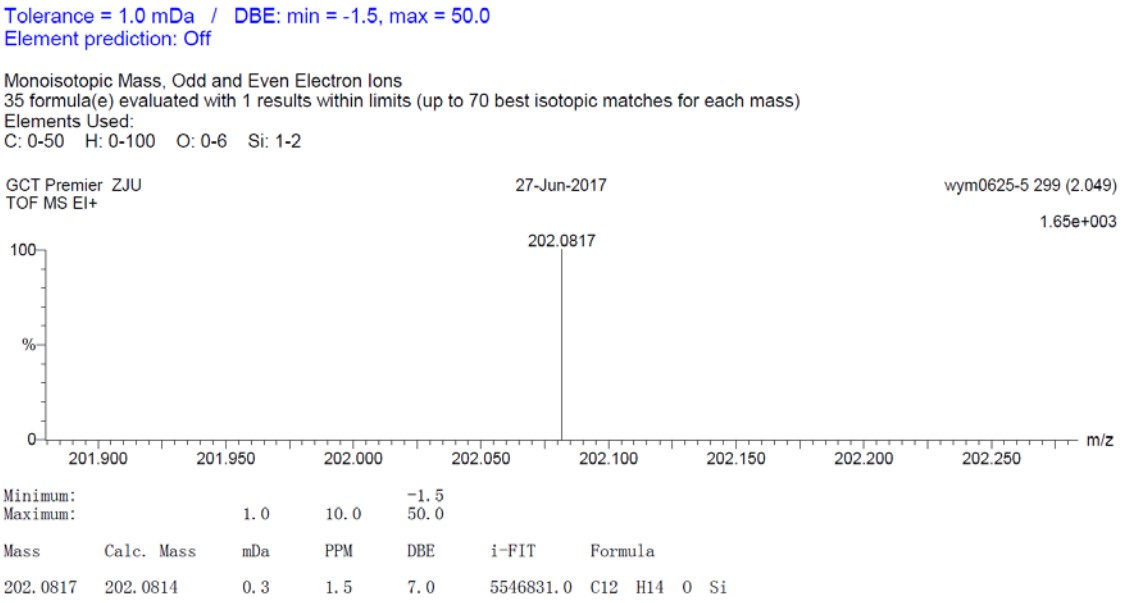

Figure S10. High resolution mass spectrum of 1-trimethylsilanyl-2-(4-formyl)-phenylacetylene.

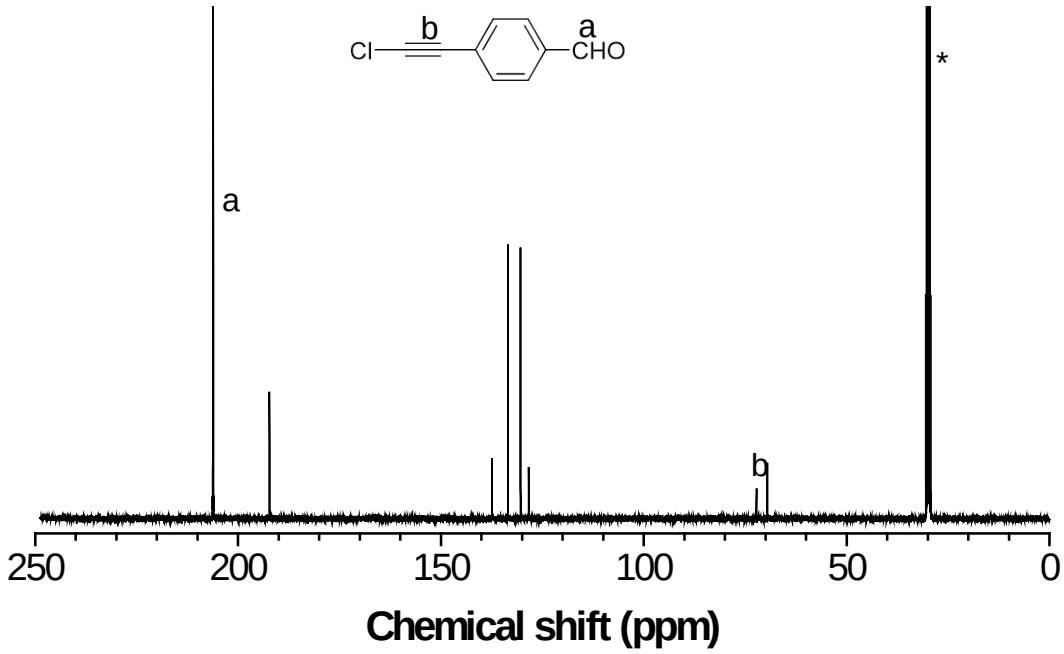

Figure S11. ^{13}C NMR spectrum of M**3** in $CDCl_3$.

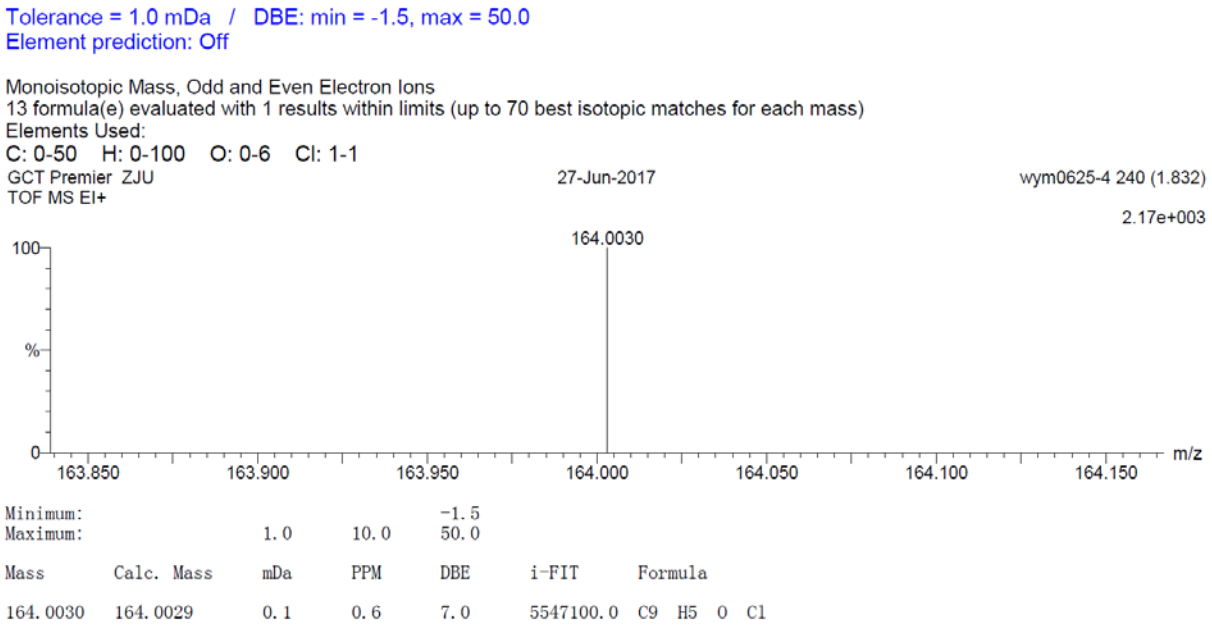

Figure S12. High resolution mass spectrum of M**3**.

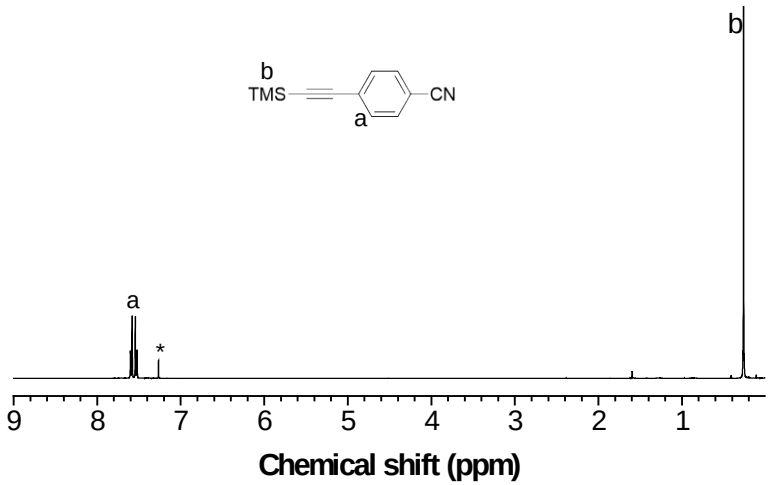

Figure S13. ^{1}H NMR spectrum of 1-trimethylsilanyl-2-(4-cyano)-phenylacetylene in $CDCl_3$.

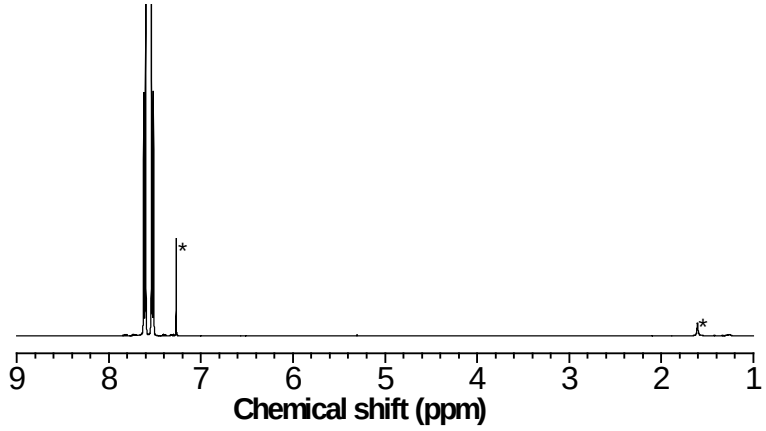

Figure S14. ^{1}H NMR spectrum of M**4** in $CDCl_3$.

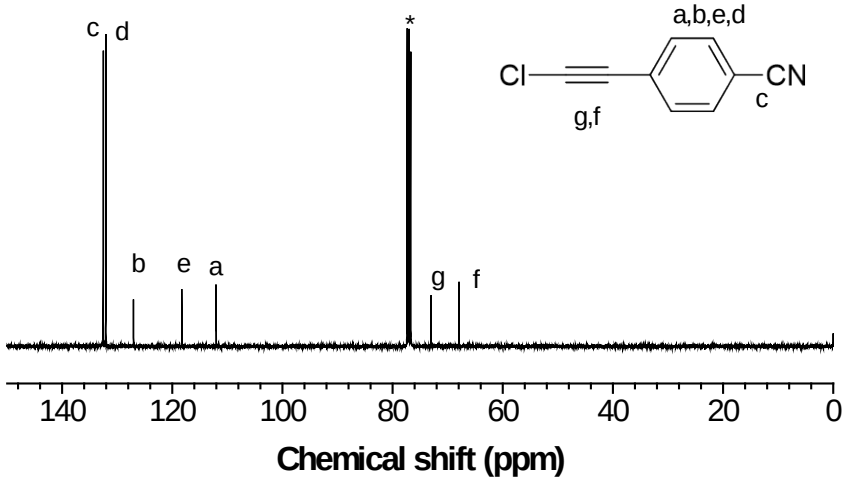

Figure S15. ^{13}C NMR spectrum of M**4** in $CDCl_3$.

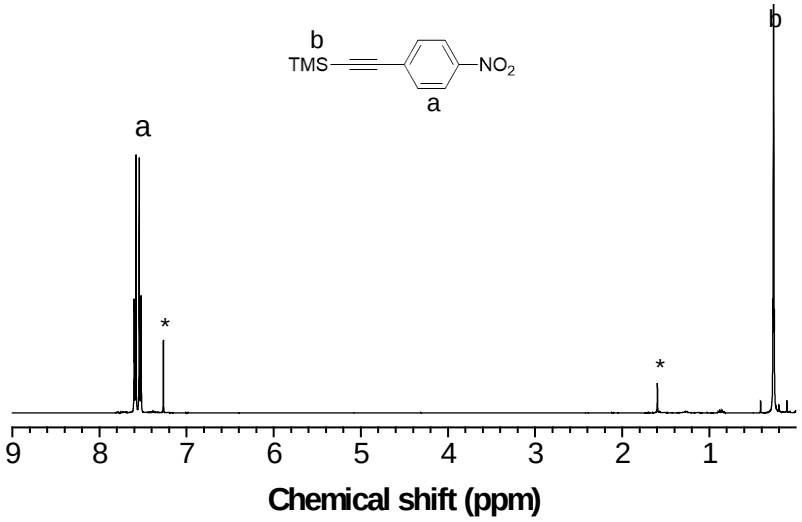

Figure S16. ^{1}H NMR spectrum of 1-trimethylsilanyl-2-(4-nitro)-phenylacetylene in $CDCl_3$.

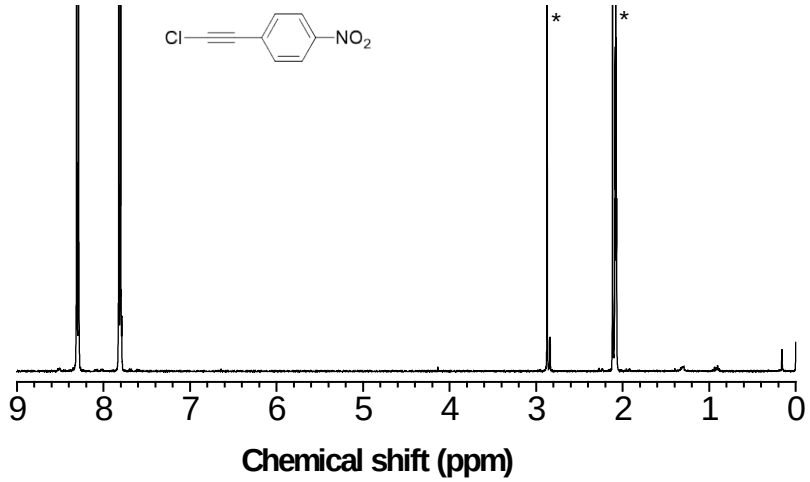

Figure S17. ^{1}H NMR spectrum of M**5** in acetone-*d*6.

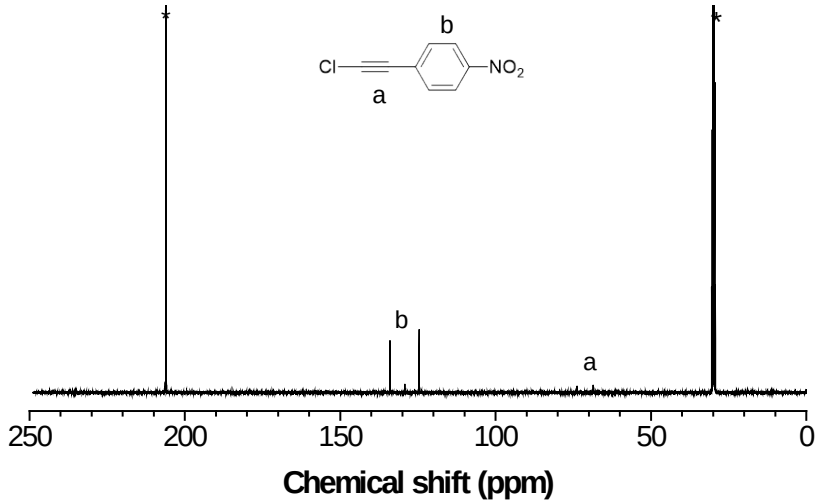

Figure S18. ^{13}C NMR spectrum of M**5** in acetone-*d*6.

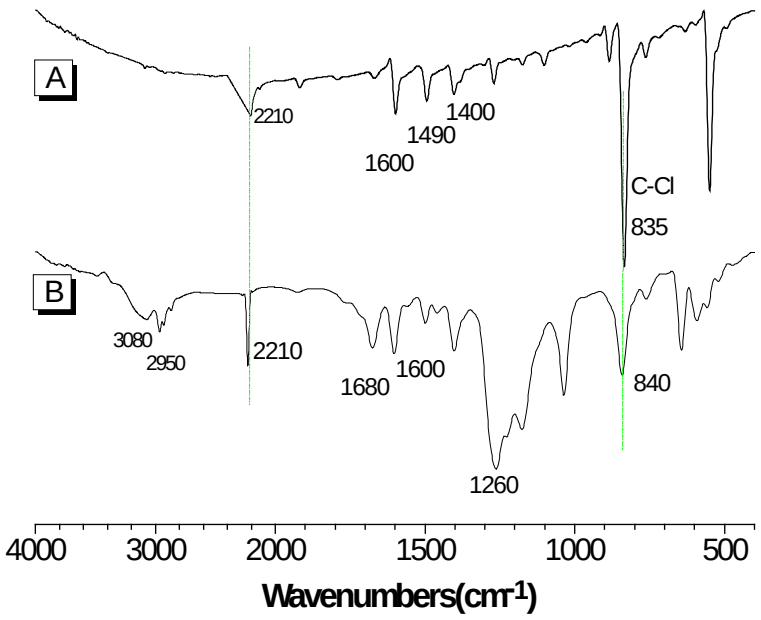

Figure S19. FTIR spectra of M**4** and the possible product of the polymerization of M**4**.

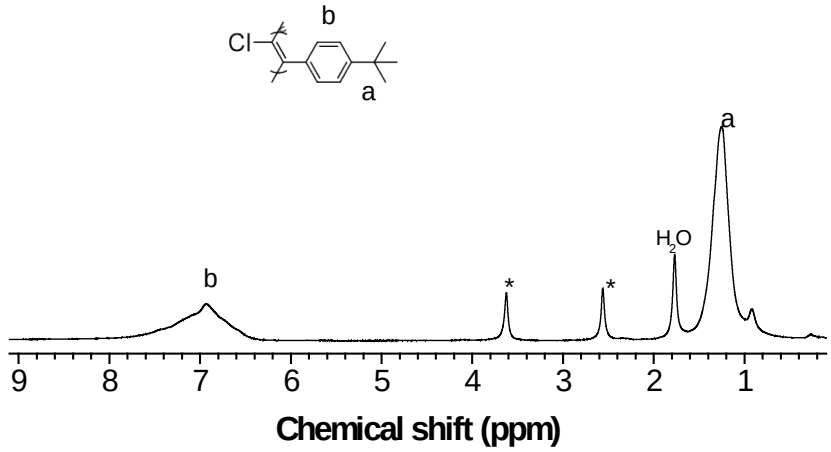

Figure S20. ^{1}H NMR spectrum of P**1** in THF-d*8*.

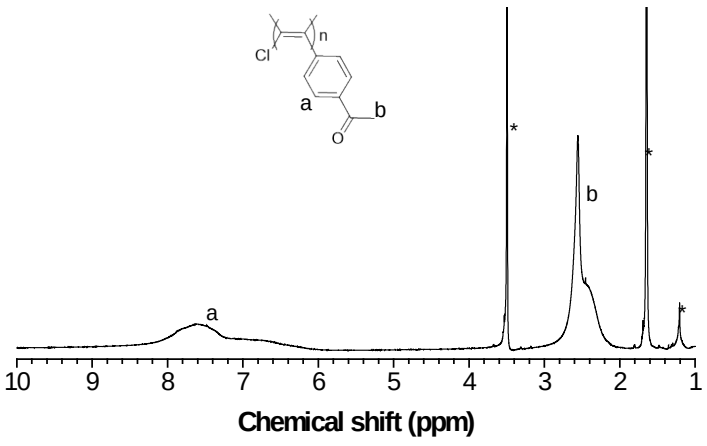

Figure S21. ^{1}H NMR spectrum of P**2** in THF-d*8*.

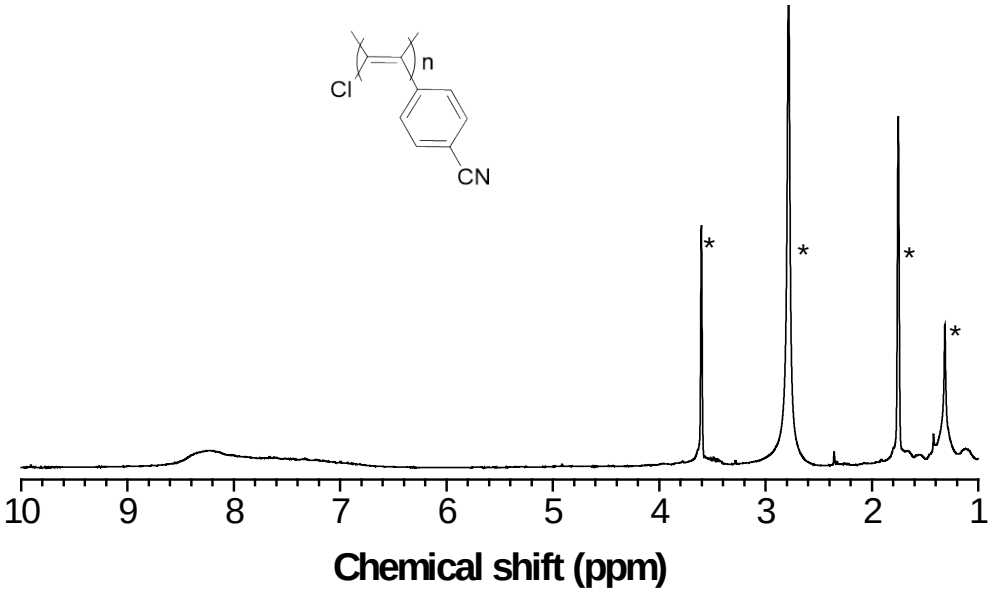

Figure S22. ^{1}H NMR spectrum of the possible product of the polymerization of M**4** in THF-d*8*.

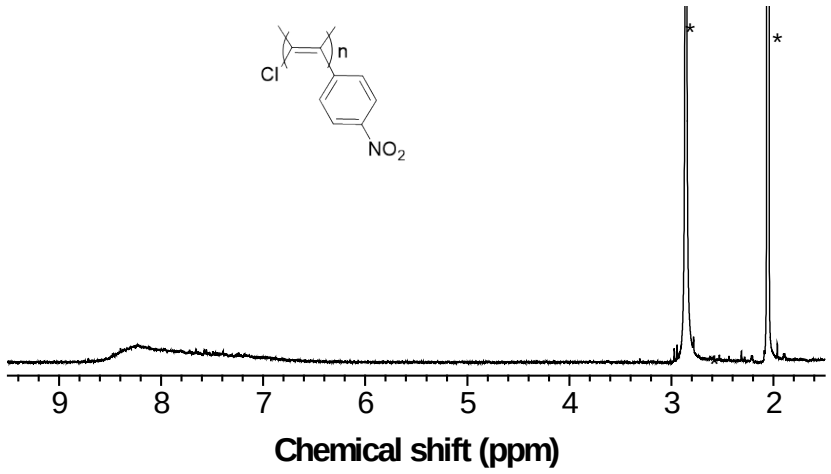

Figure S23. ^{1}H NMR spectrum of P**5** in acetone-d*6*.