

Supporting Information for

Preparation of conjugated polyphenylenes from maleimide-based enediynes through thermal triggered Bergman cyclization

Shiyuan Sun, Chuanchuan Zhu, Depeng Song, Fei Li, and Aiguo Hu*

Shanghai Key Laboratory of Advanced Polymeric Materials, School of Materials Science and Engineering, East China University of Science and Technology, Shanghai, 200237, China.

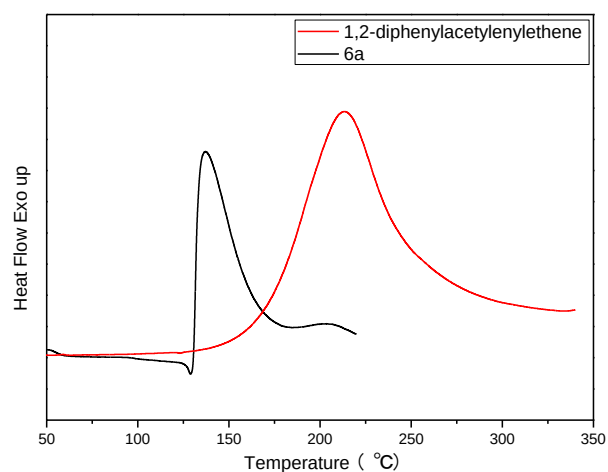


Figure S1. DSC curves of enediyne compounds **6a** and 1,2-diphenylacetylenylethene.

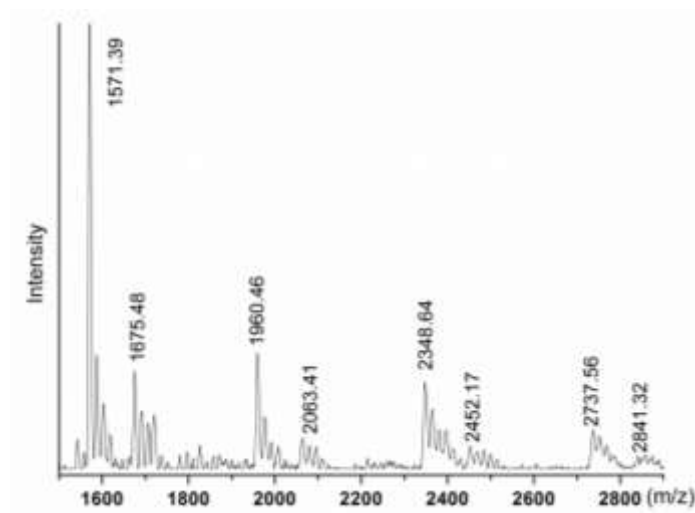
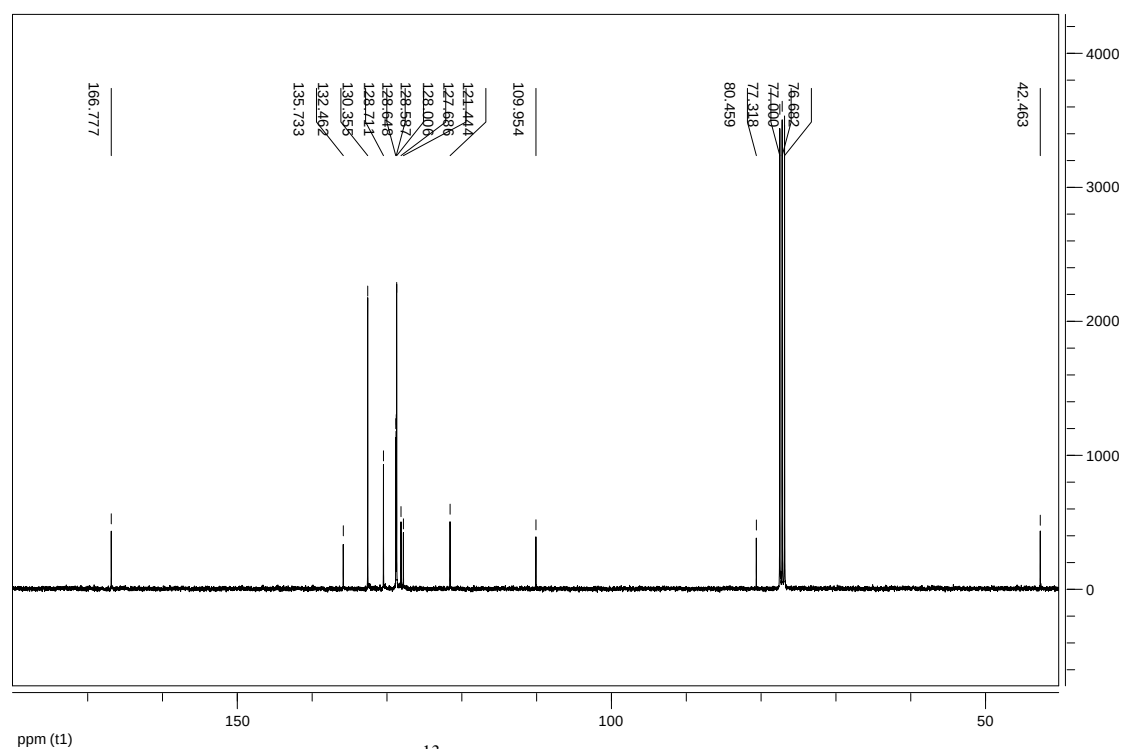
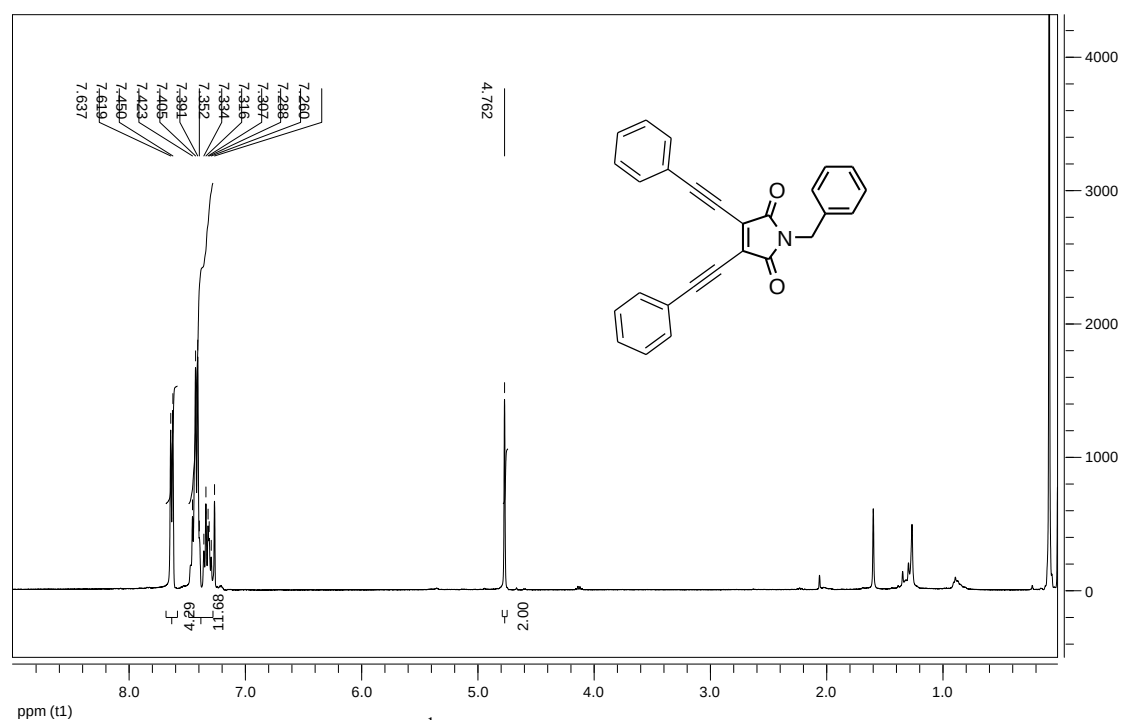


Figure S2. MALDI-TOF mass spectrum of polymer obtained from addition of styrene to a freshly prepared polymer **7a**.



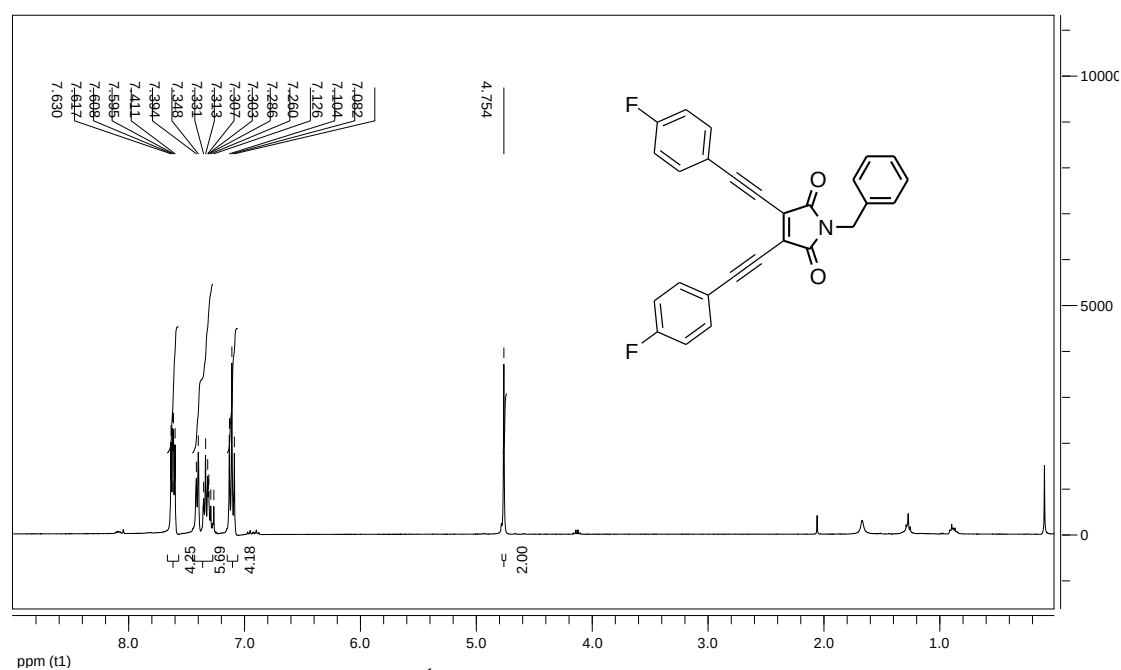


Figure S5 ¹H NMR spectrum of compound **6b**

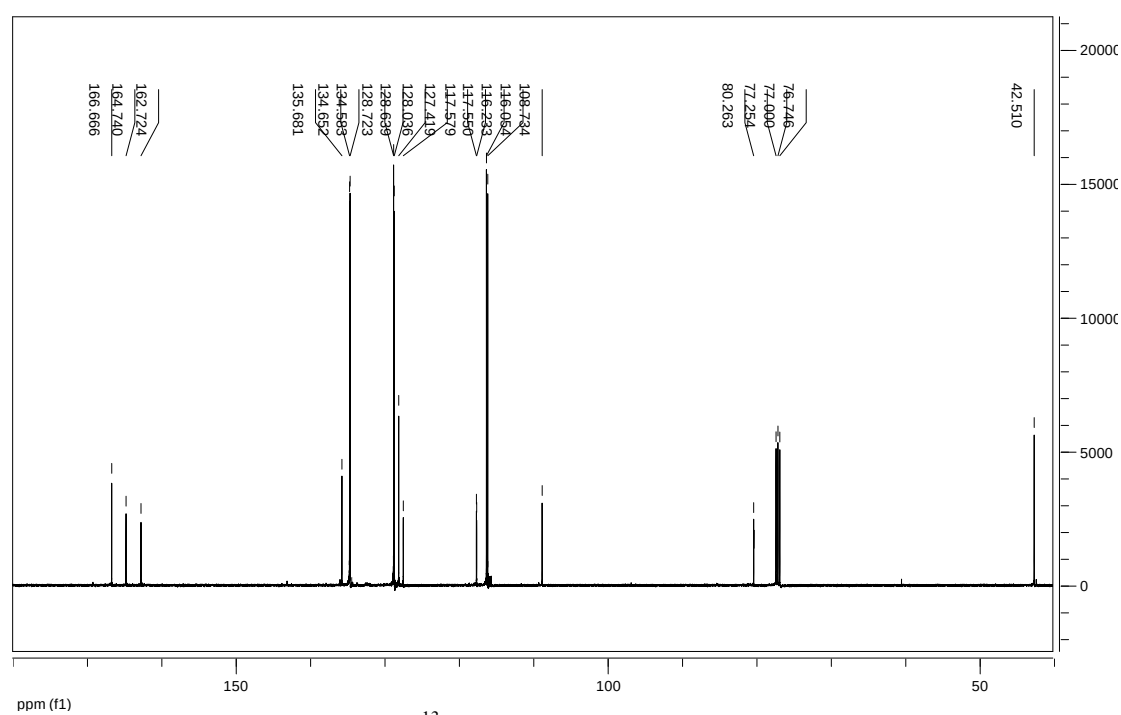


Figure S6 ¹³C NMR spectrum of compound **6b**

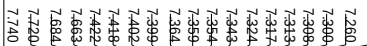


Figure S7 ^1H NMR spectrum of compound **6c**



Figure S8 ^{13}C NMR spectrum of compound **6c**

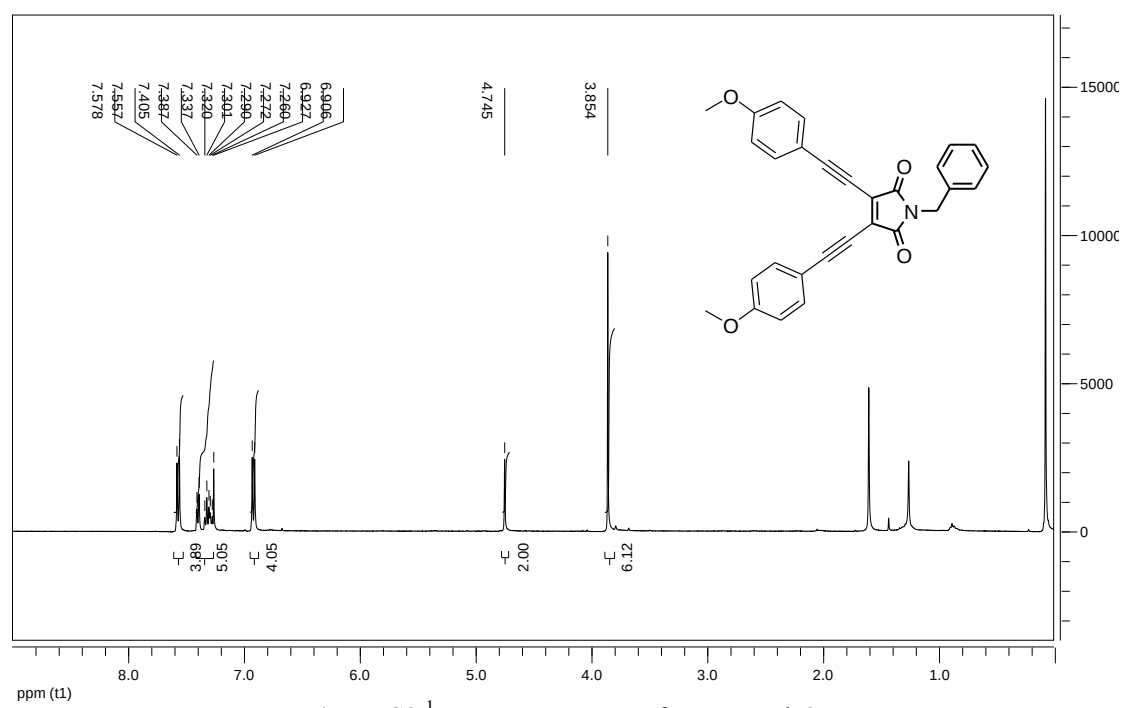


Figure S9 ¹H NMR spectrum of compound **6d**

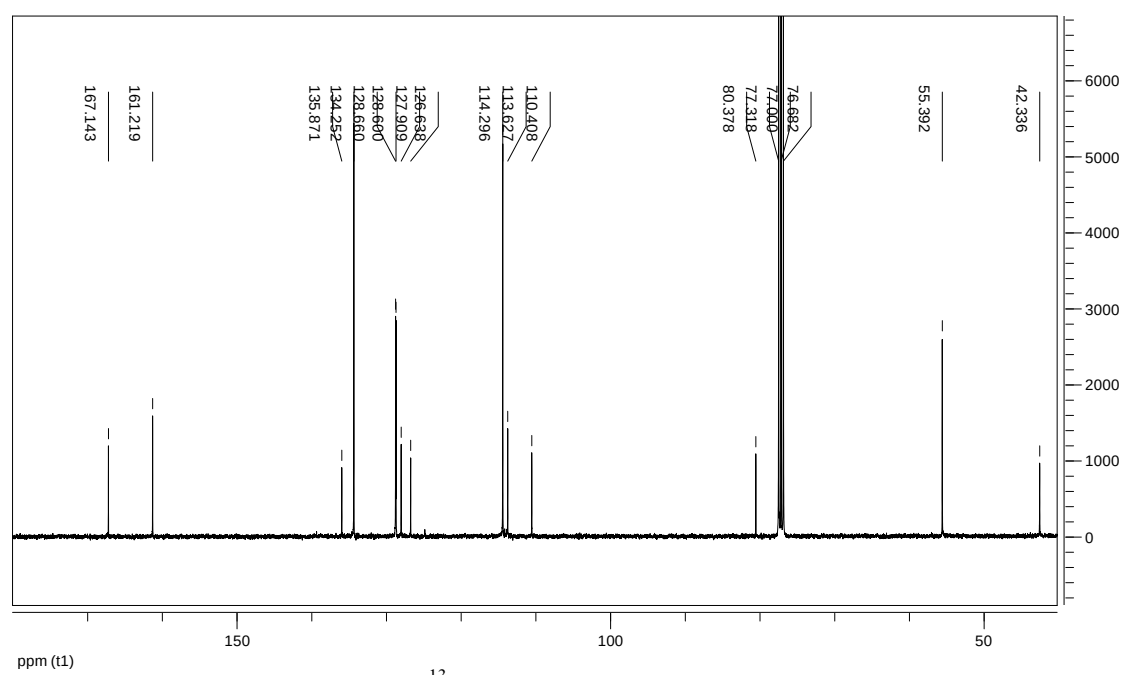


Figure S10 ¹³C NMR spectrum of compound **6d**

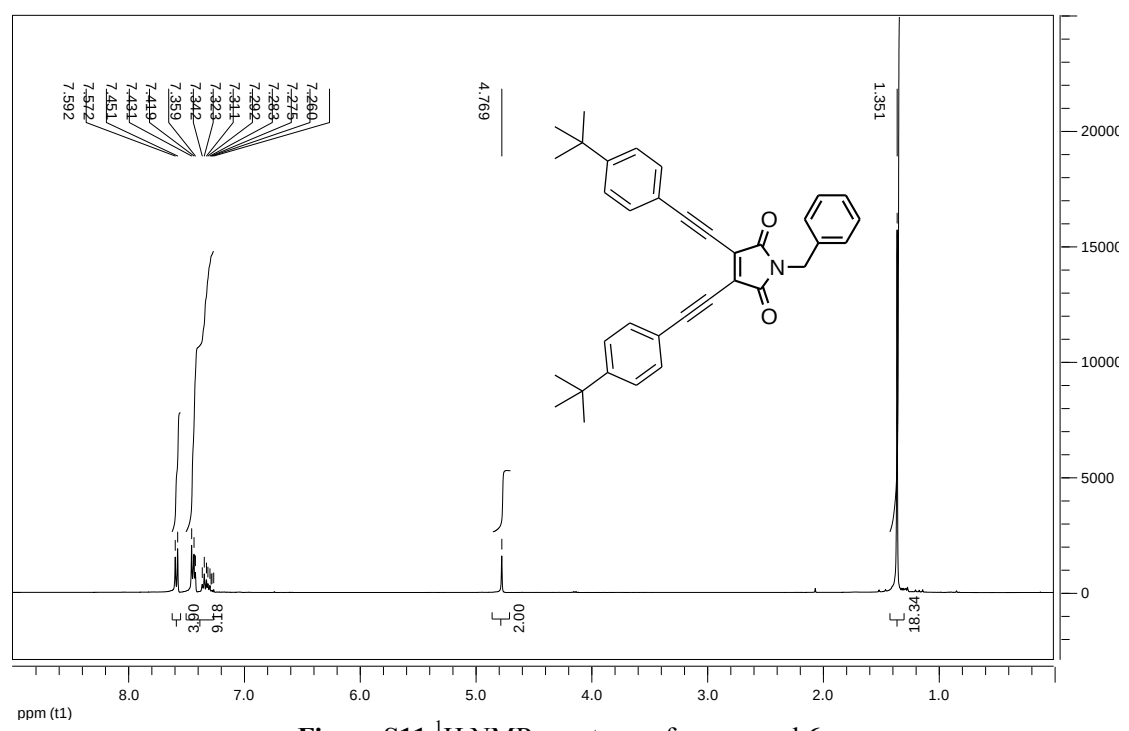


Figure S11 ¹H NMR spectrum of compound **6e**

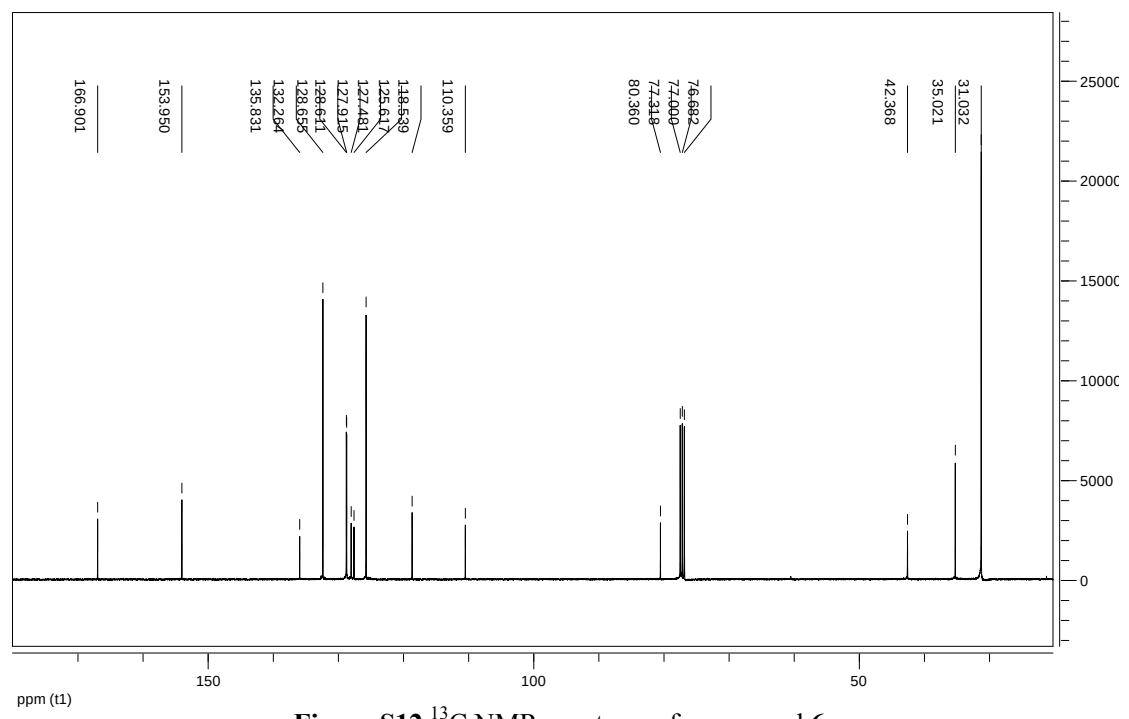


Figure S12 ¹³C NMR spectrum of compound **6e**

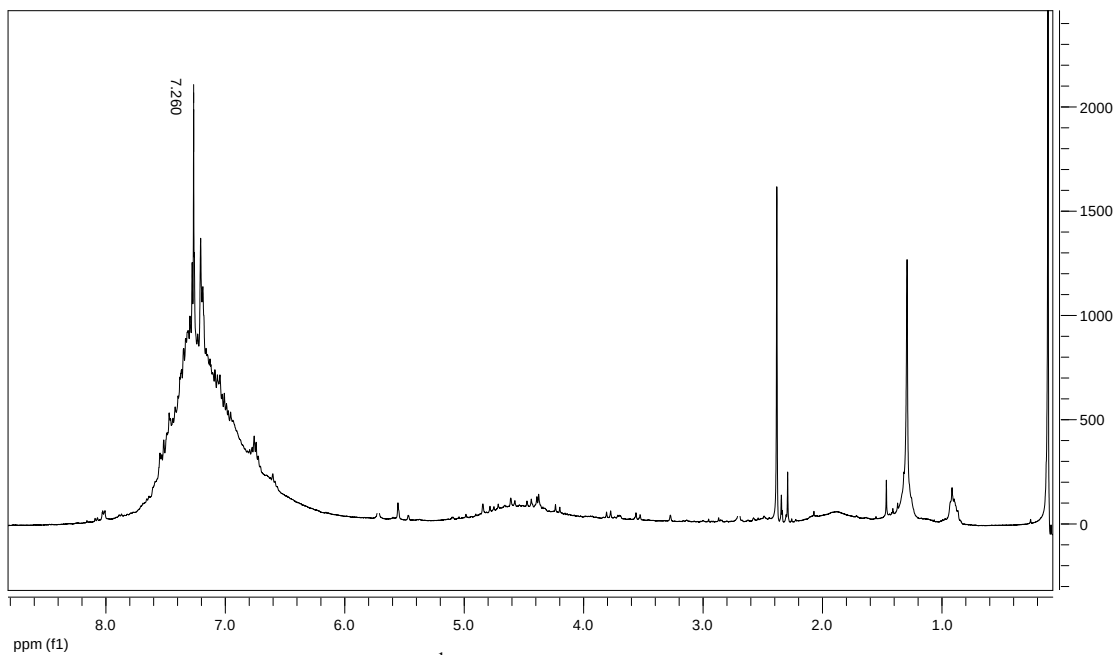


Figure S13 ¹H NMR spectrum of oligomer **7a**

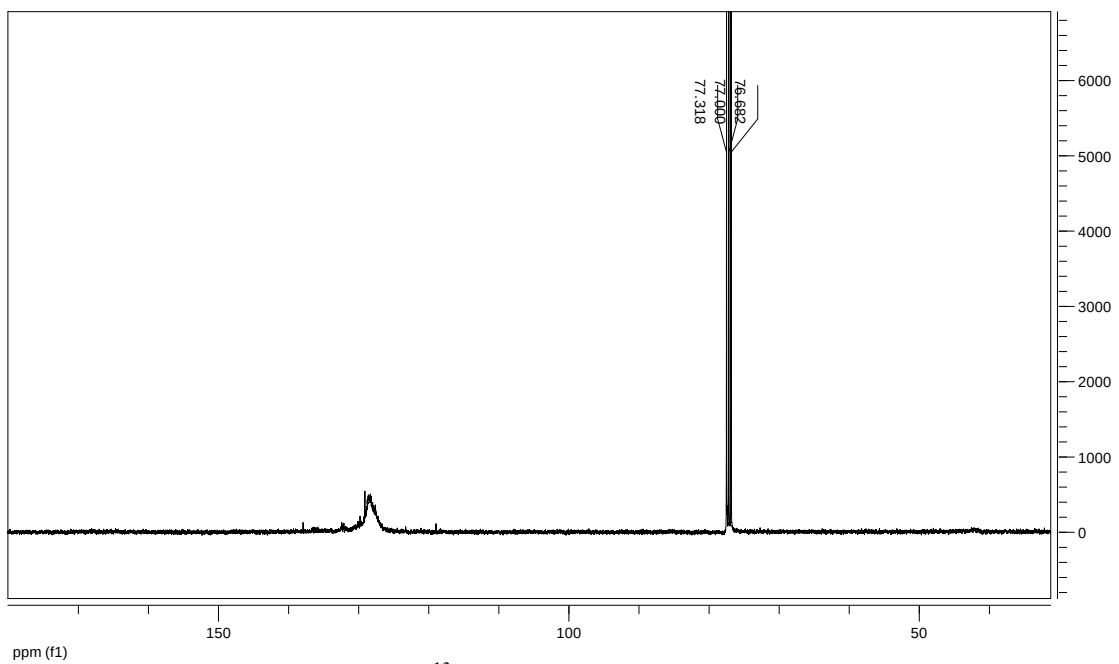


Figure S14 ¹³C NMR spectrum of oligomer **7a**

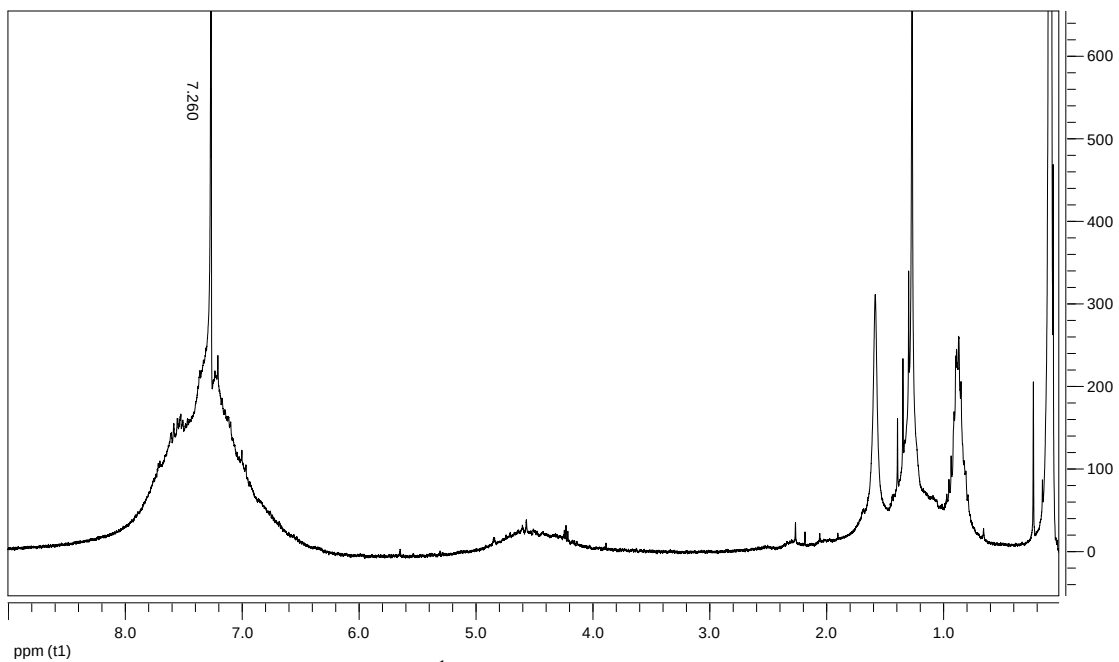


Figure S15 ^1H NMR spectrum of oligomer **7c**

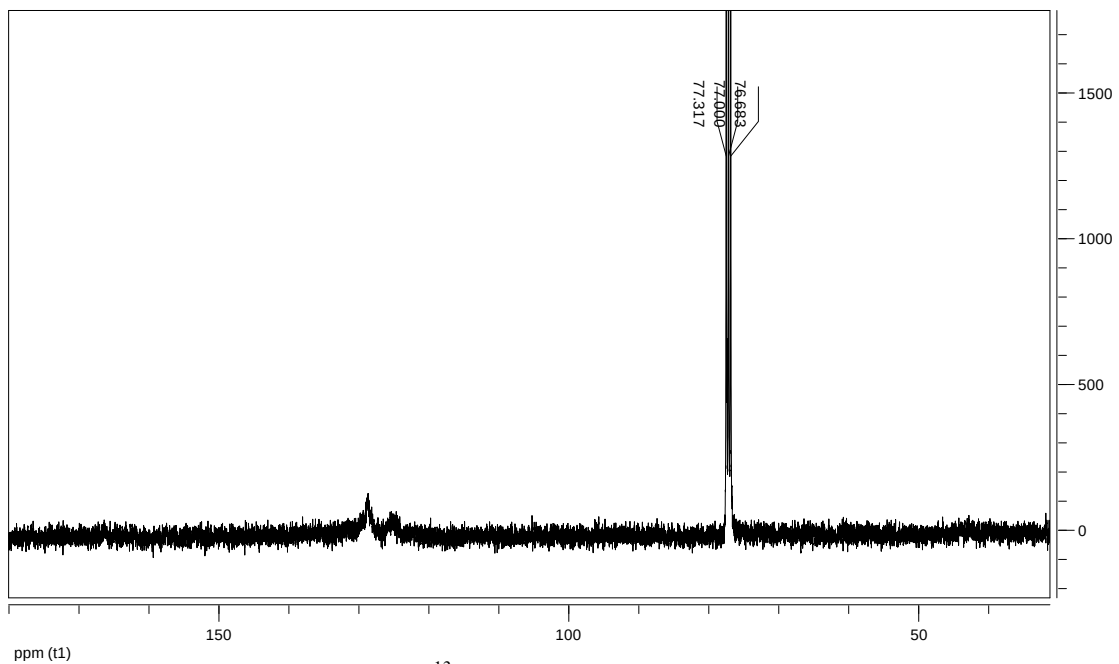


Figure S16 ^{13}C NMR spectrum of oligomer **7c**

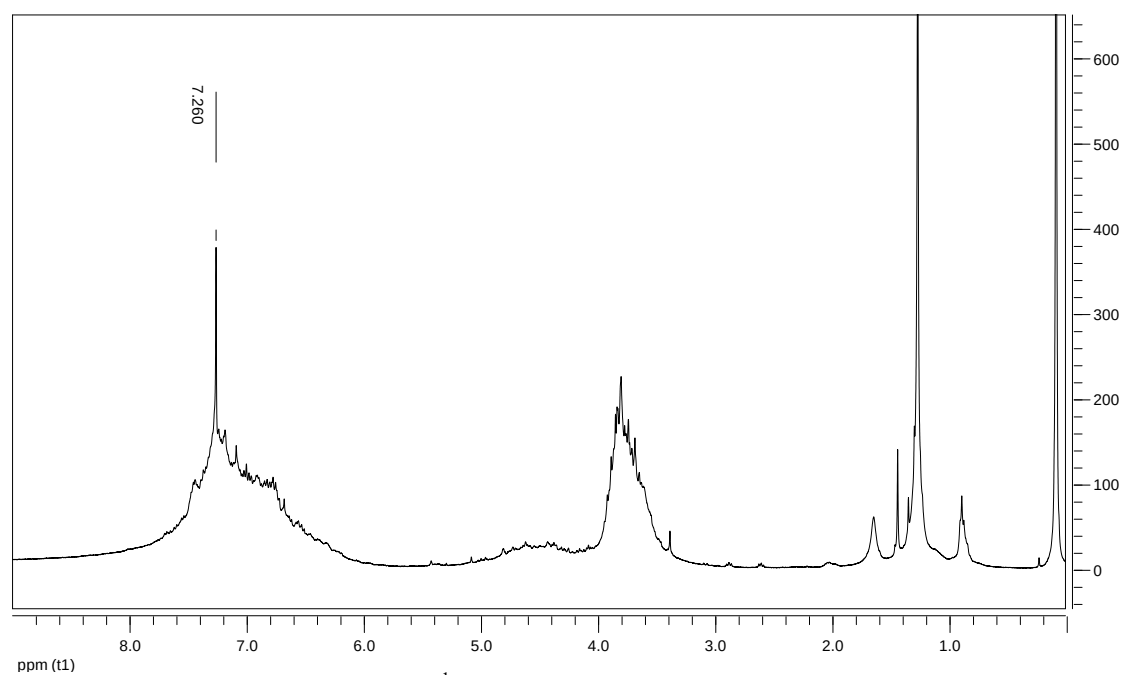


Figure S17 ^1H NMR spectrum of oligomer 7d

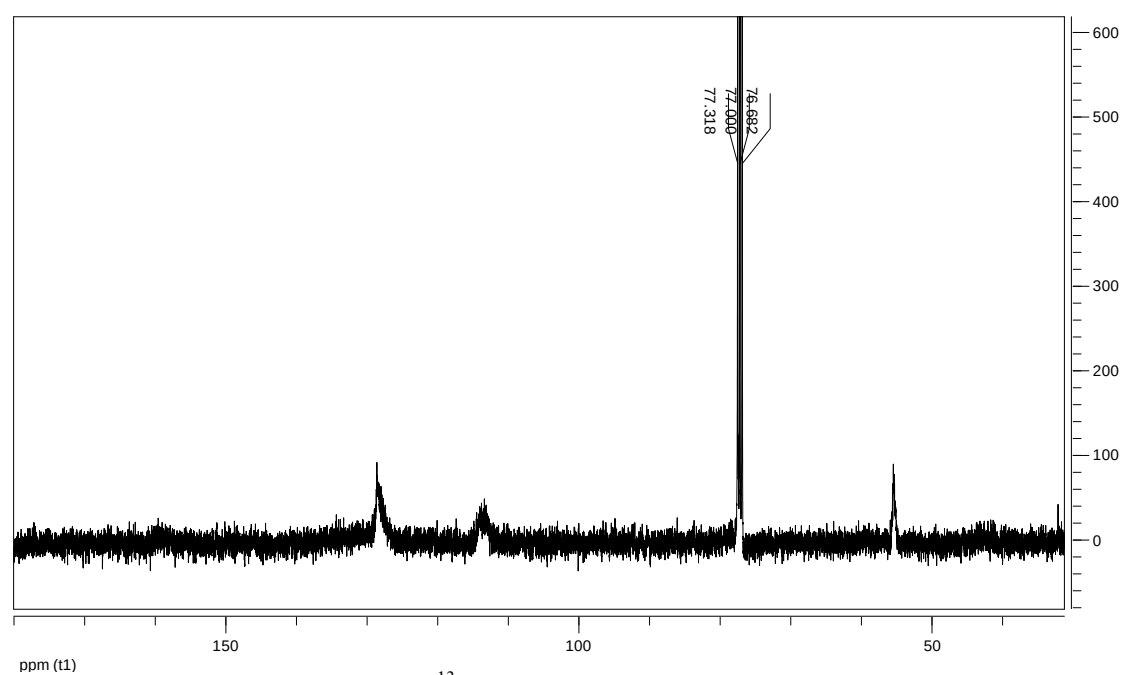


Figure S18 ^{13}C NMR spectrum of oligomer 7d

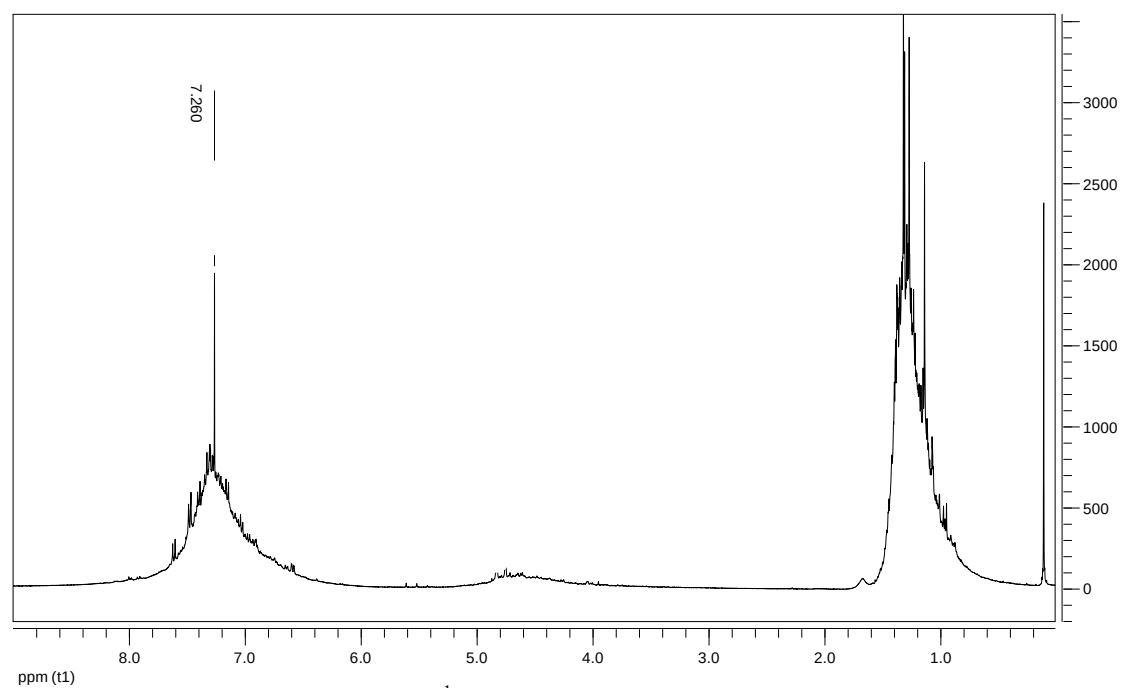


Figure S19 ^1H NMR spectrum of oligomer **7e**

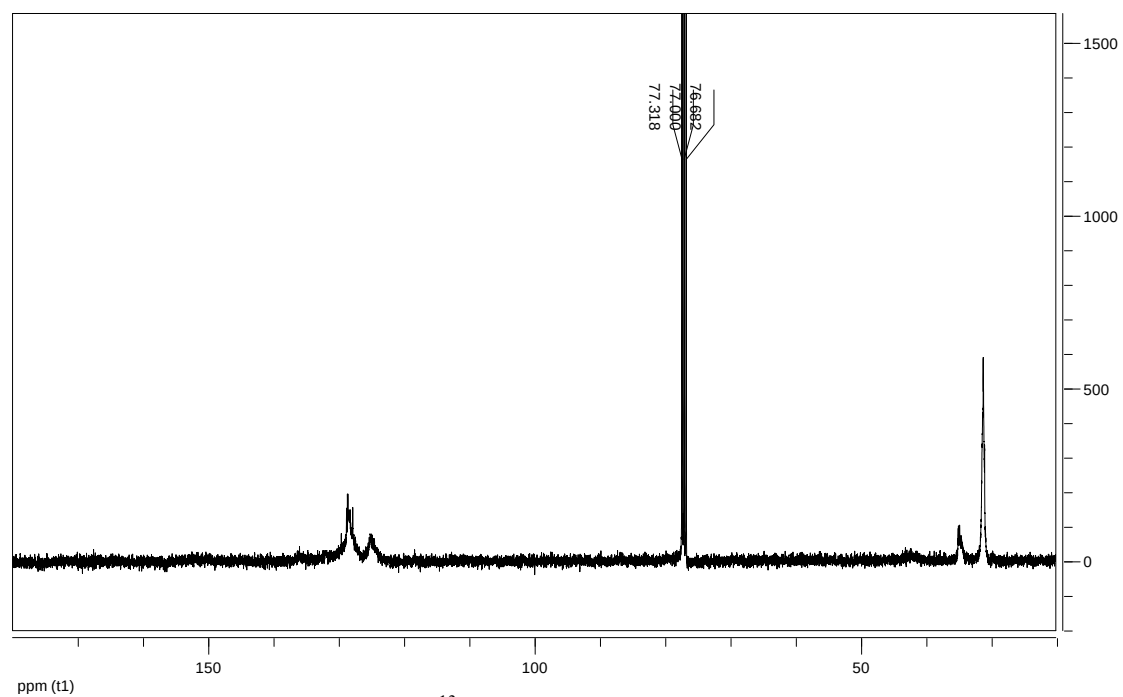


Figure S20 ^{13}C NMR spectrum of oligomer **7e**

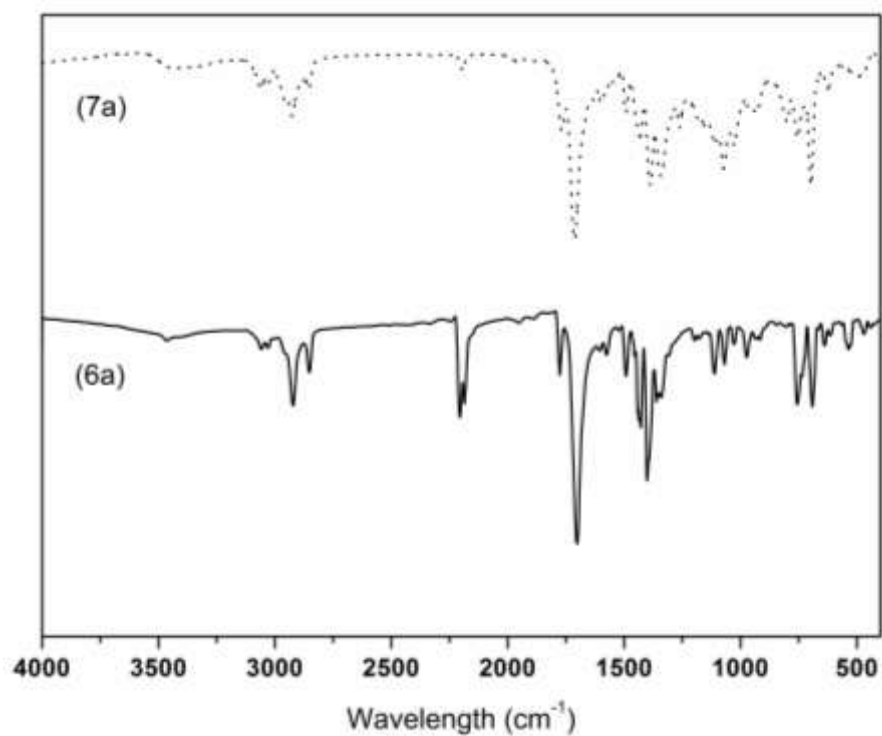


Figure S21. IR spectra of **6b** and **7b**.

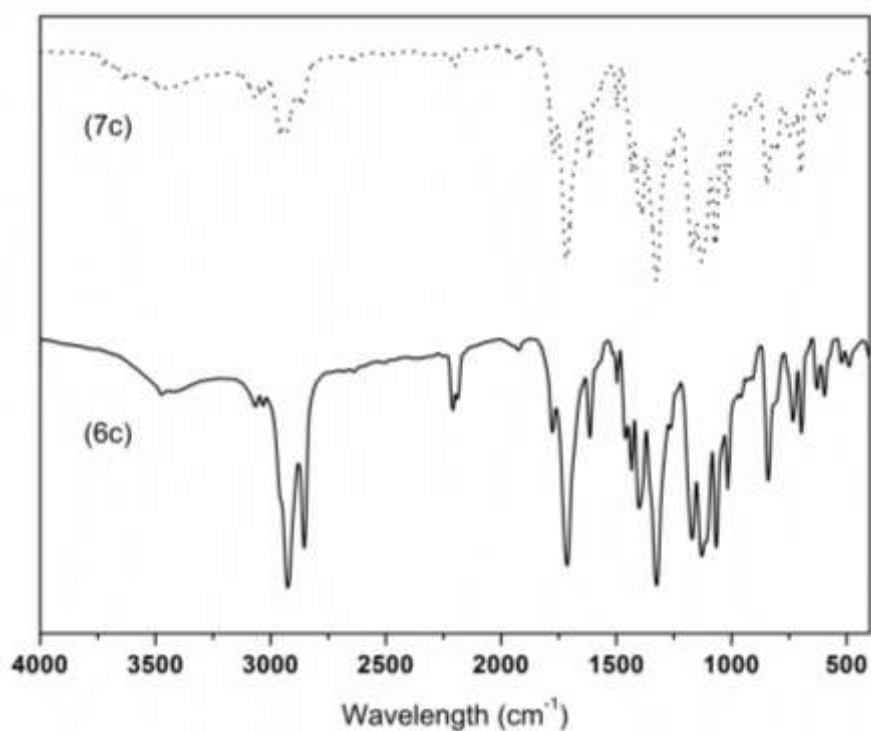


Figure S22. IR spectra of **6c** and **7c**.

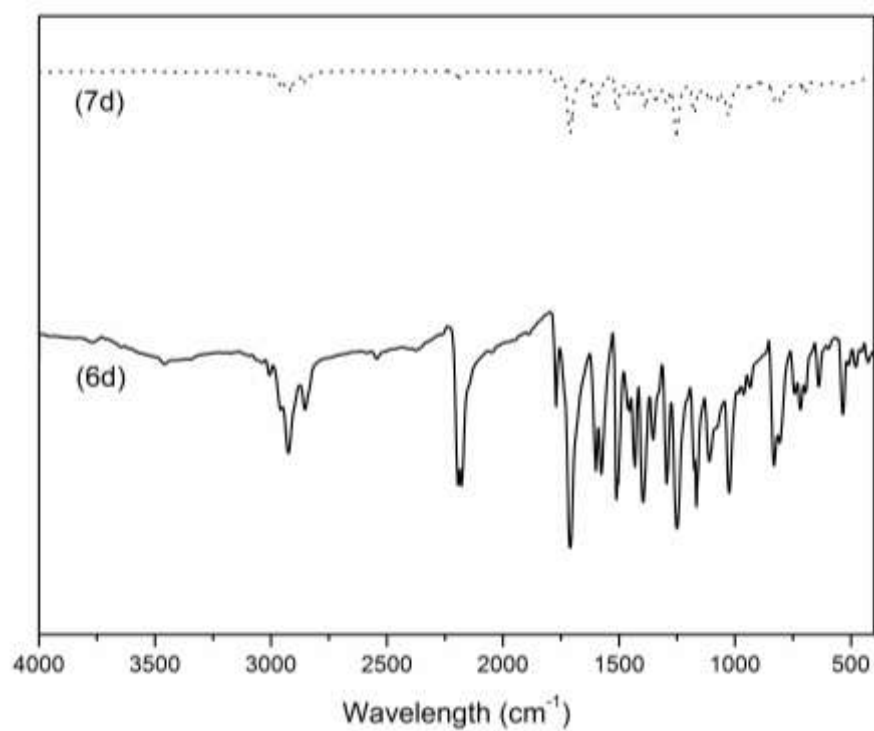


Figure S23. IR spectra of **6d** and **7d**.

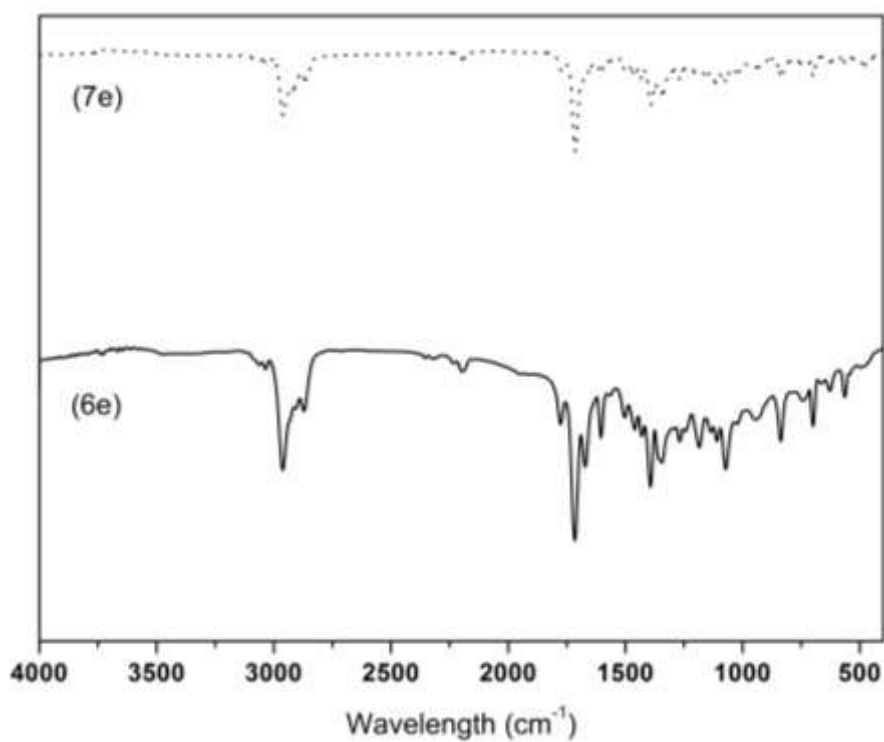


Figure S24. IR spectra of **6e** and **7e**.

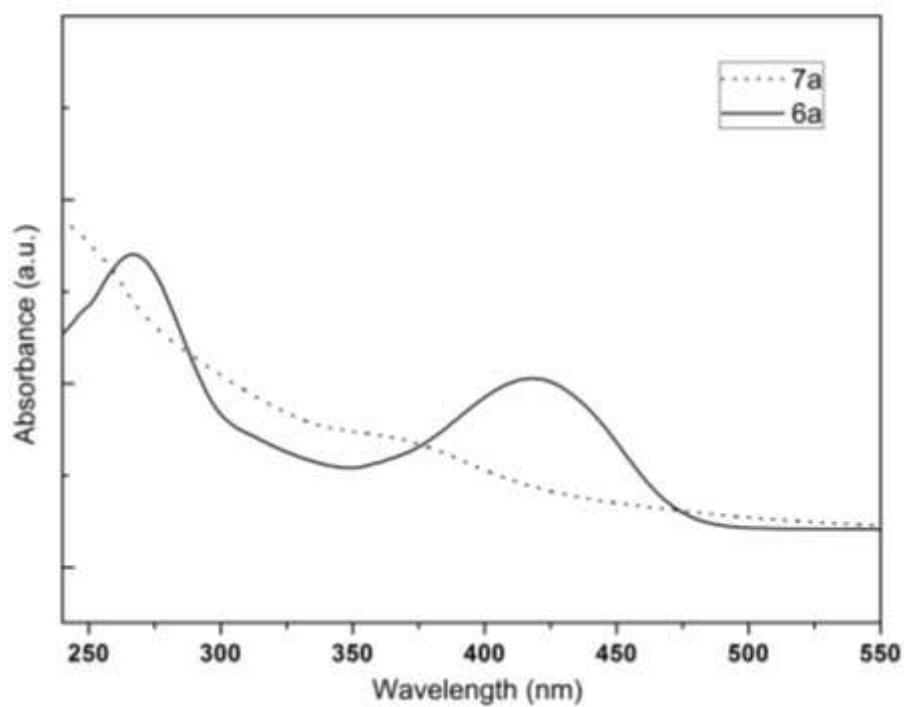


Figure S25. UV-vis absorbance spectra of **6a** (solid line) and **7a** (dot line), 10^{-4} mol/L in THF.

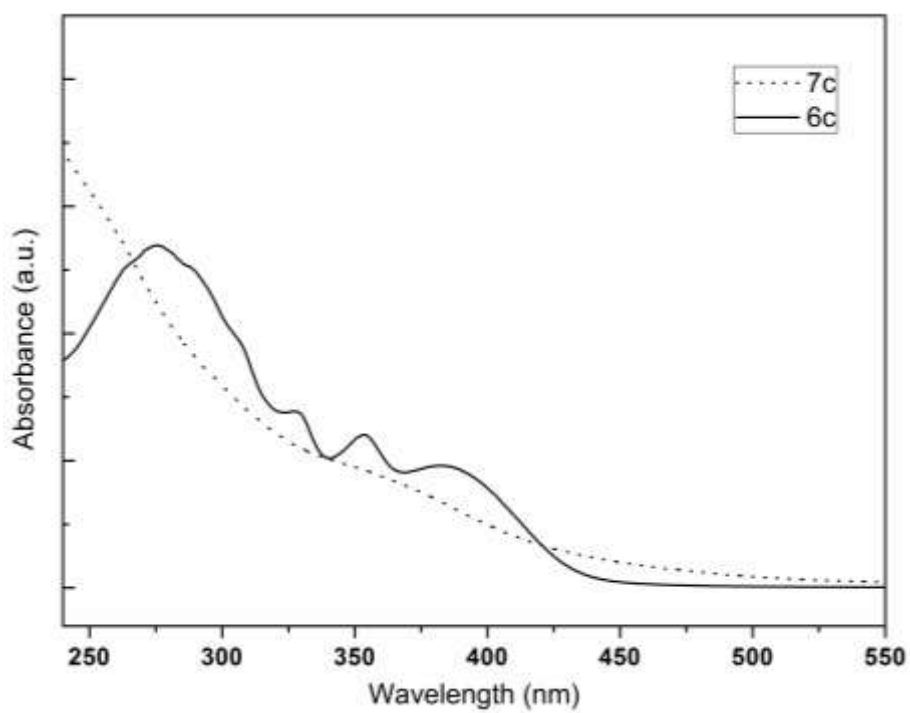


Figure S26. UV-vis absorbance spectra of **6c** (solid line) and **7c** (dot line), 10^{-4} mol/L in THF.

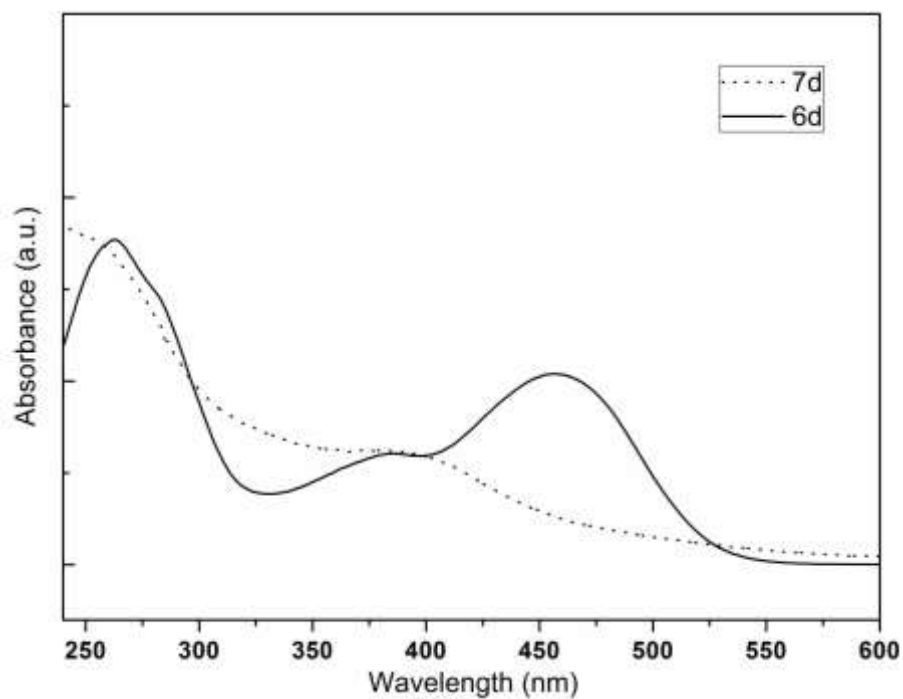


Figure S27. UV-vis absorbance spectra of **6d** (solid line) and **7d** (dot line), 10^{-4} mol/L in THF.

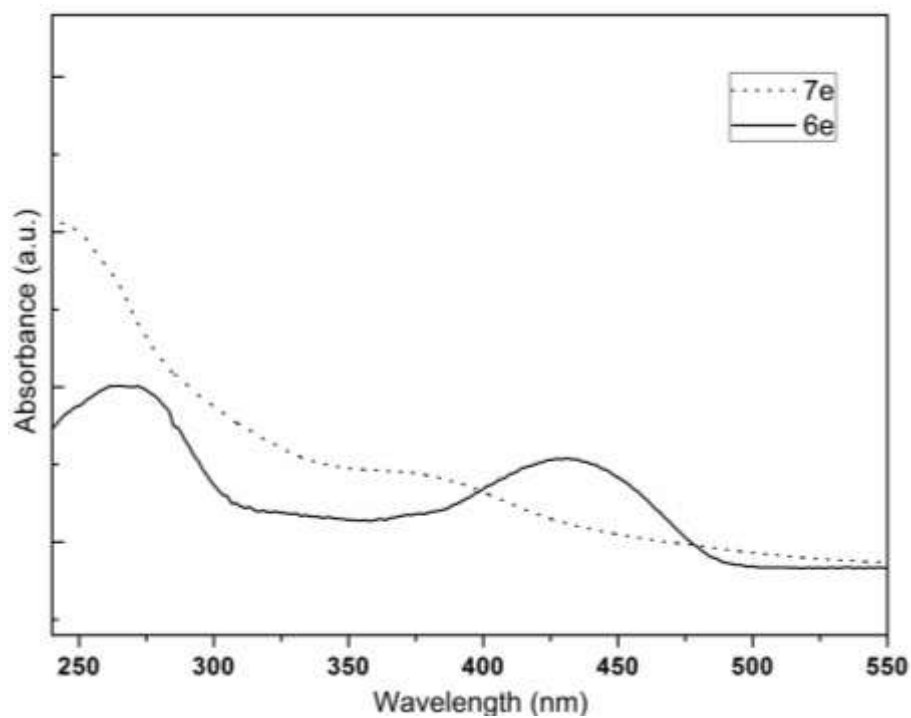


Figure S28. UV-vis absorbance spectra of **6e** (solid line) and **7e** (dot line), 10^{-4} mol/L in THF.

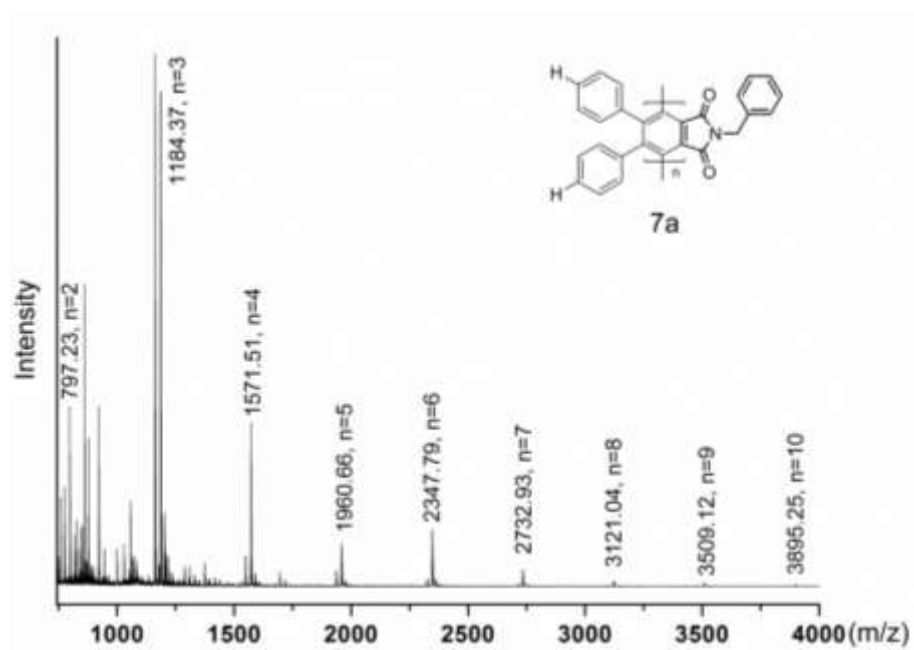


Figure S29. MALDI-TOF mass spectrum of a 7a

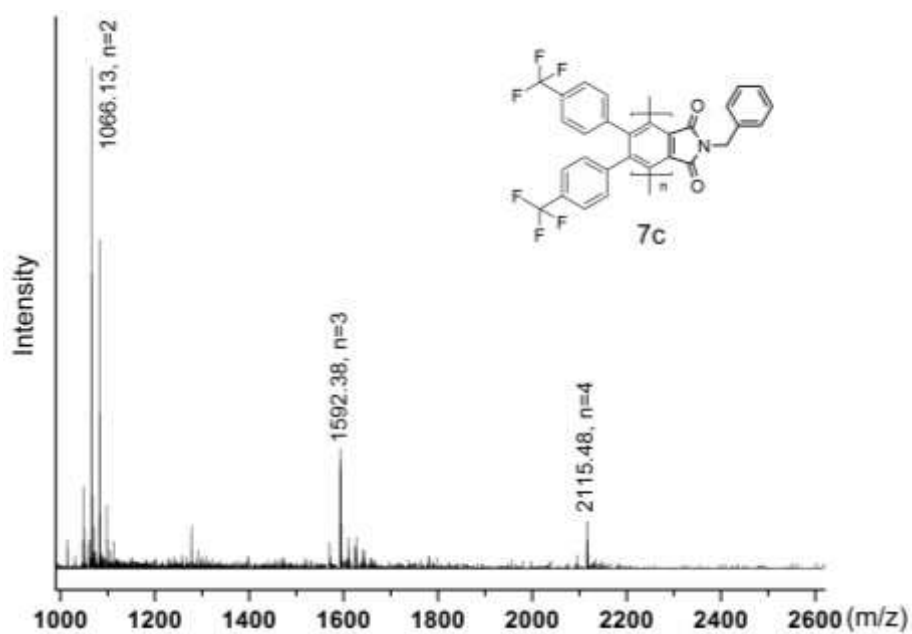


Figure S30. MALDI-TOF mass spectrum of a 7c

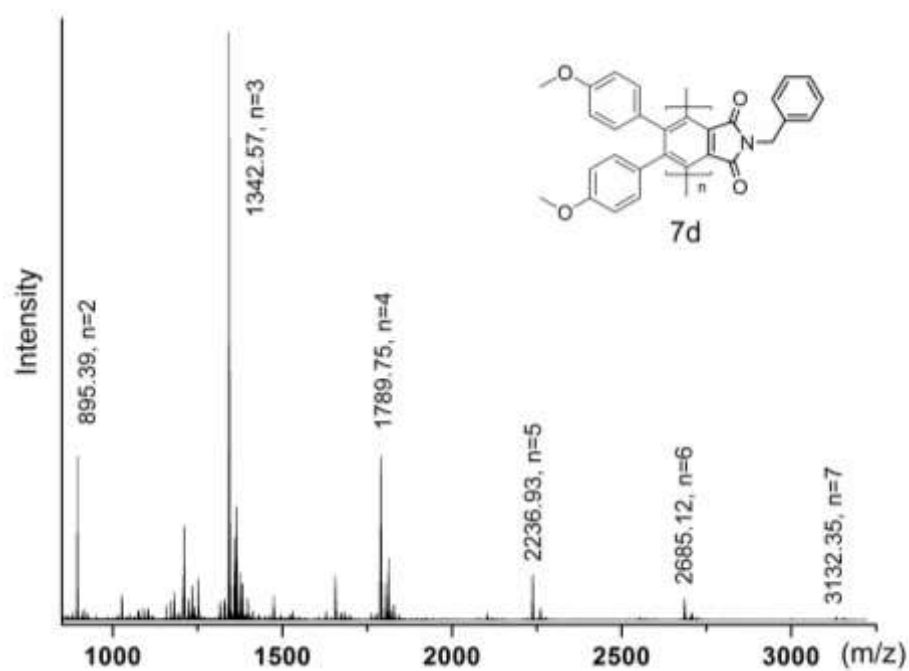


Figure S31. MALDI-TOF mass spectrum of a **7d**

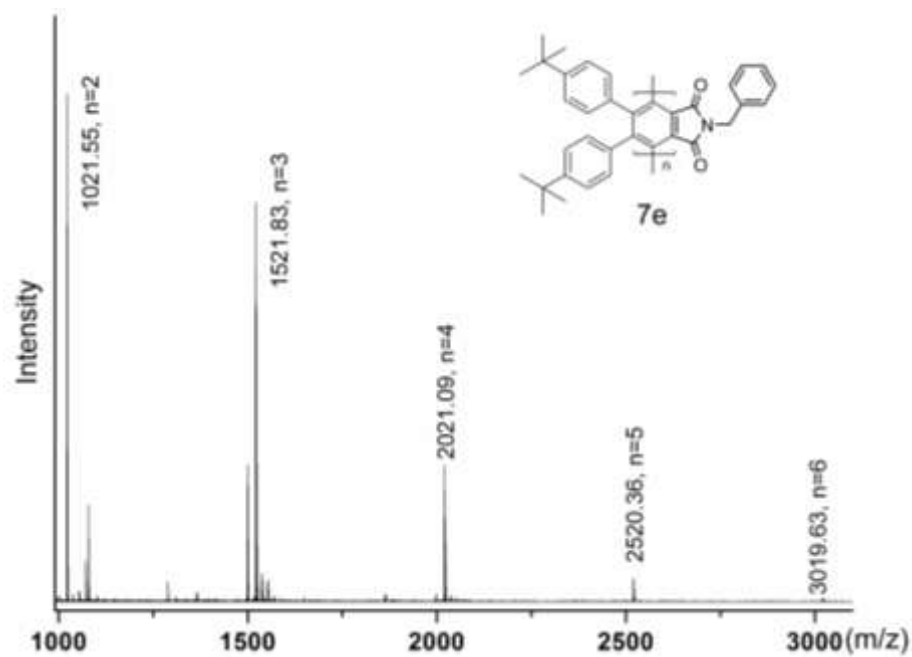


Figure S32. MALDI-TOF mass spectrum of a **7e**

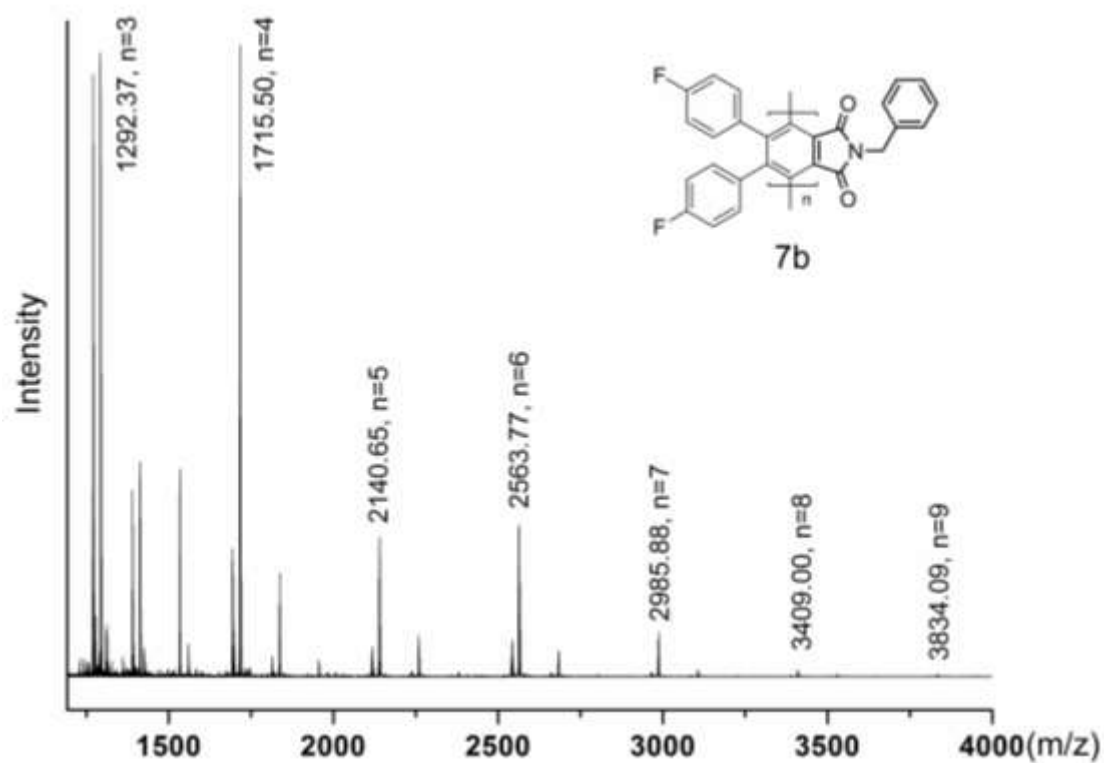


Figure S33. Full MALDI-TOF mass spectrum of a 7b

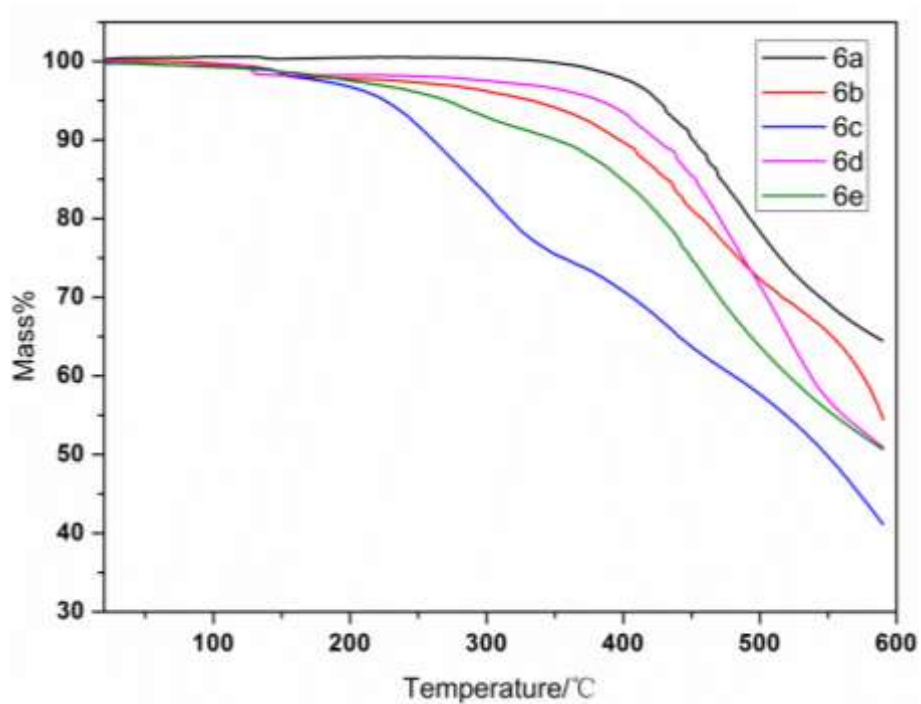


Figure S34. TGA curves of enediyne compounds.