

Figure SI-1. ¹H-NMR spectrum of PIBC (**5a**)

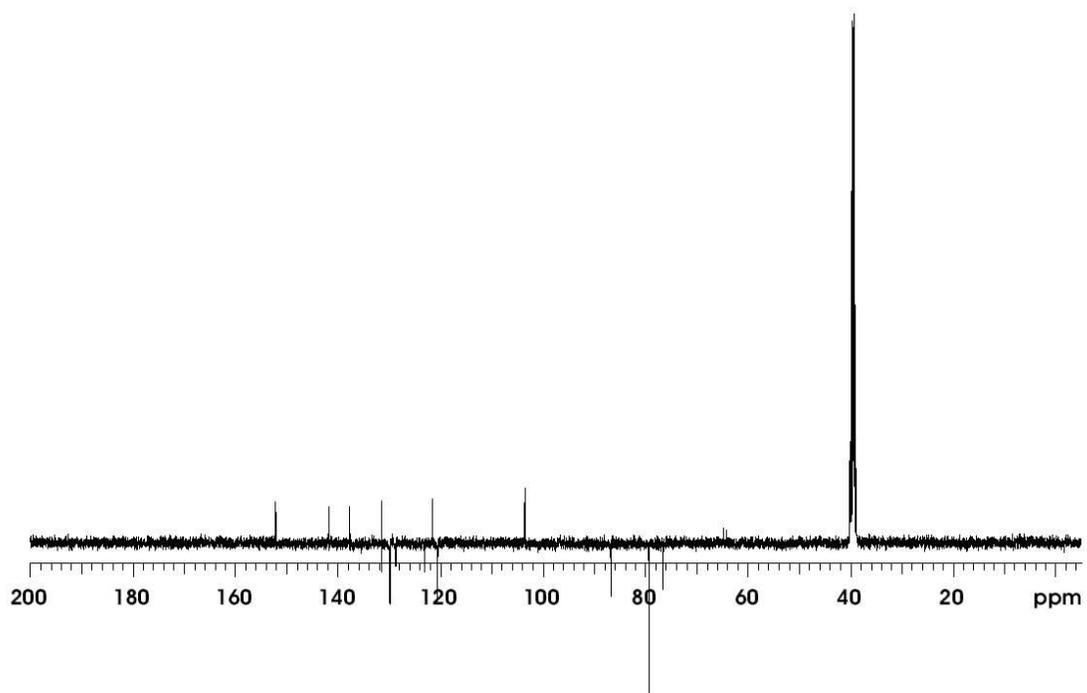


Figure SI-2. ^{13}C -NMR spectrum of PIBC (**5a**)

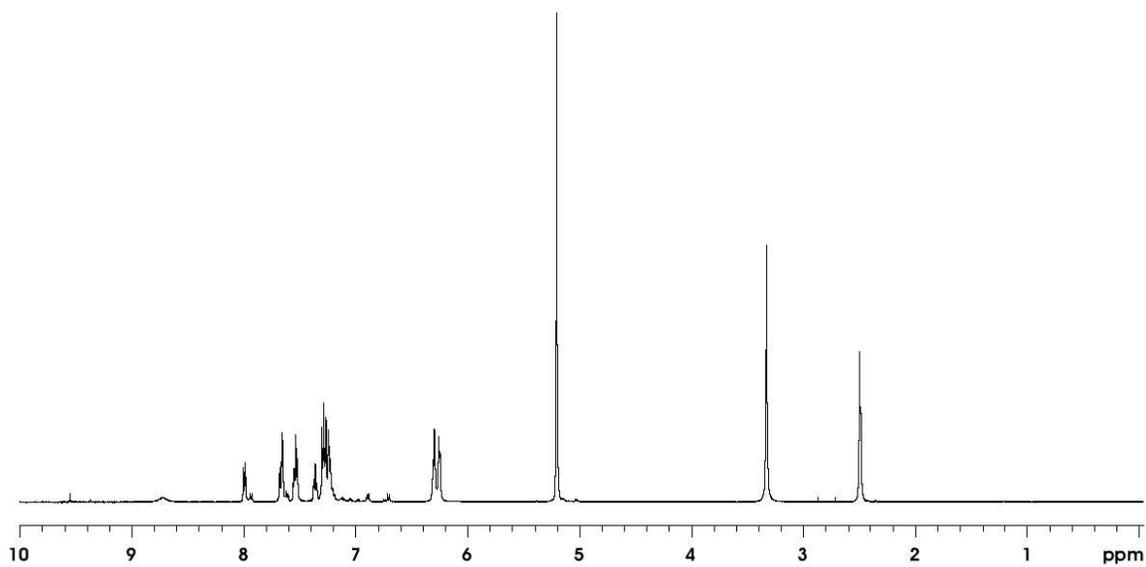


Figure SI-3. $^1\text{H-NMR}$ spectrum of PFBC (6a)

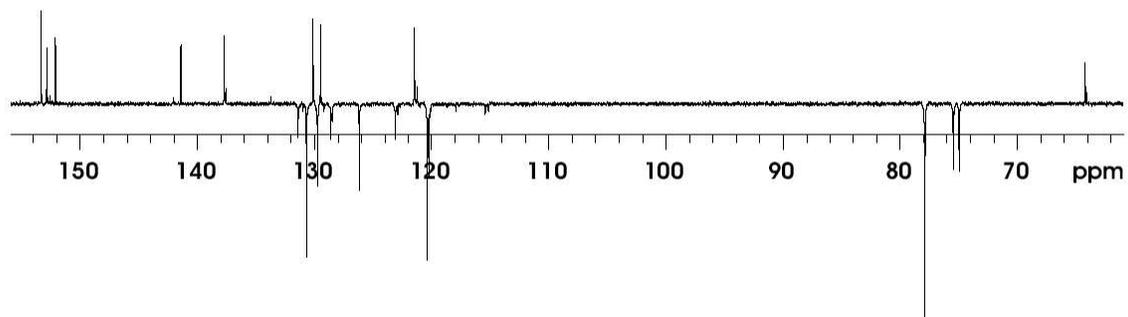


Figure SI-4. $^{13}\text{C-NMR}$ spectrum of PFBC (6a)

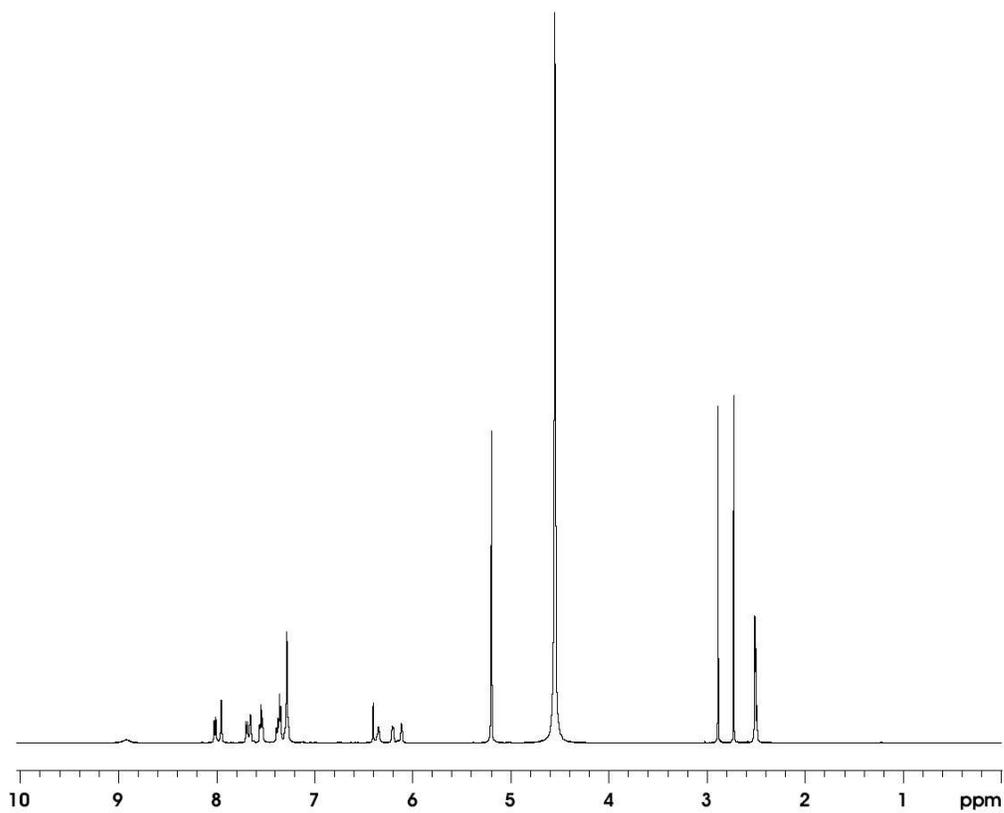


Figure SI-5. $^1\text{H-NMR}$ spectrum of MFBC complex (6b)

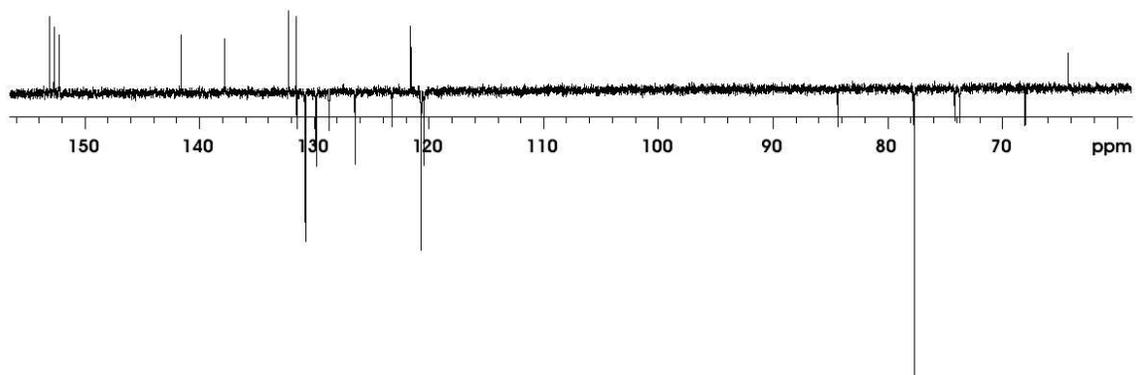


Figure SI-6. $^{13}\text{C-NMR}$ spectrum of MFBC complex (6b)

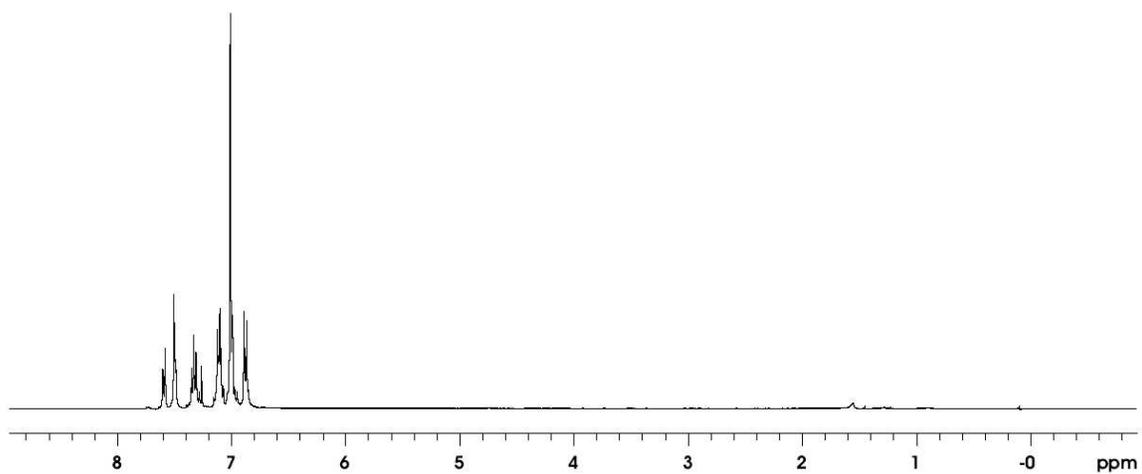


Figure SI-7. $^1\text{H-NMR}$ spectrum of PTE (**7a**)

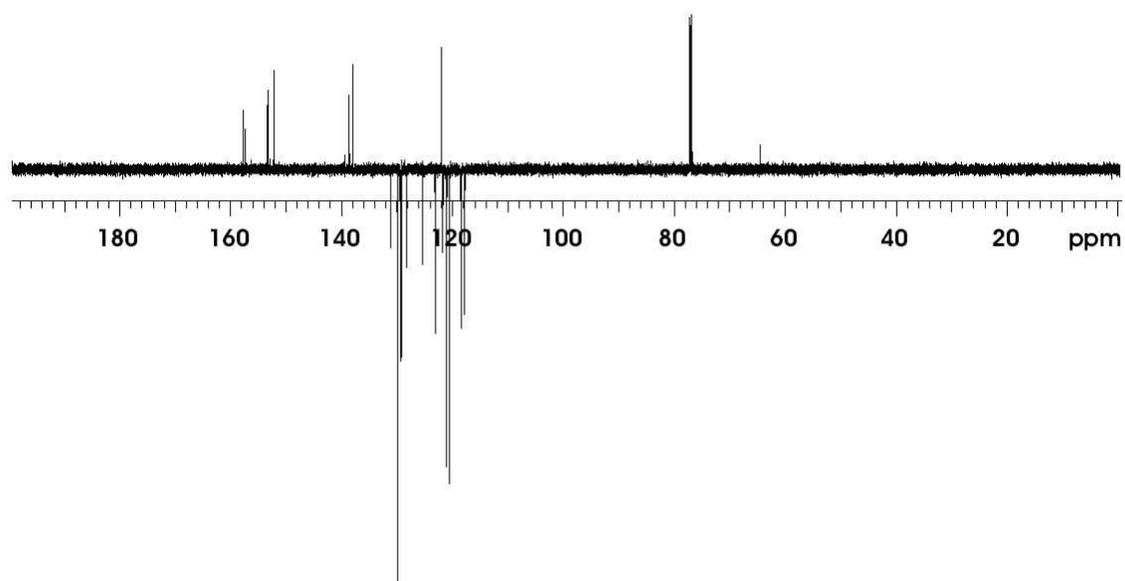


Figure SI-8. $^{13}\text{C-NMR}$ spectrum of PTE (**7a**)

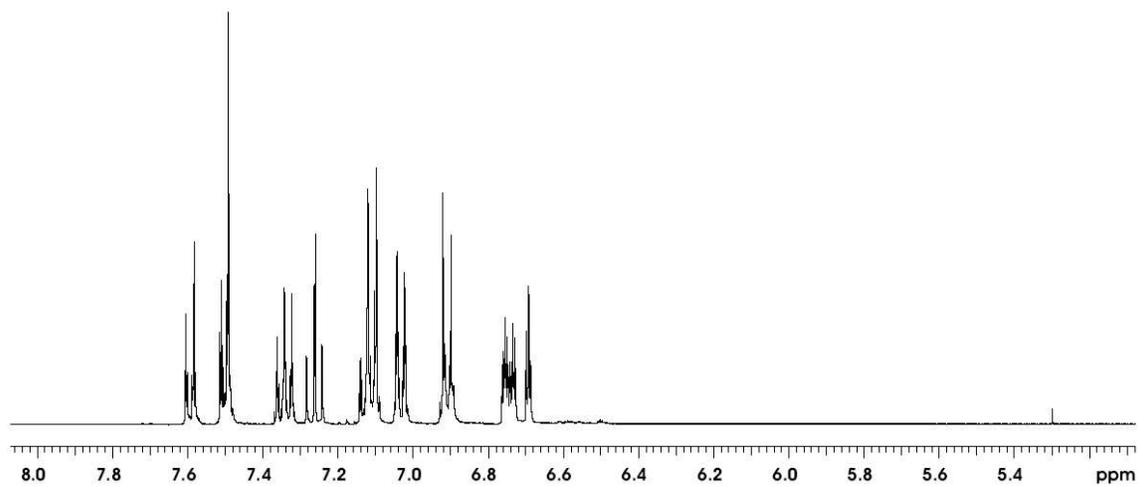


Figure SI-9. ¹H-NMR spectrum of MTE monomer (**7b**)

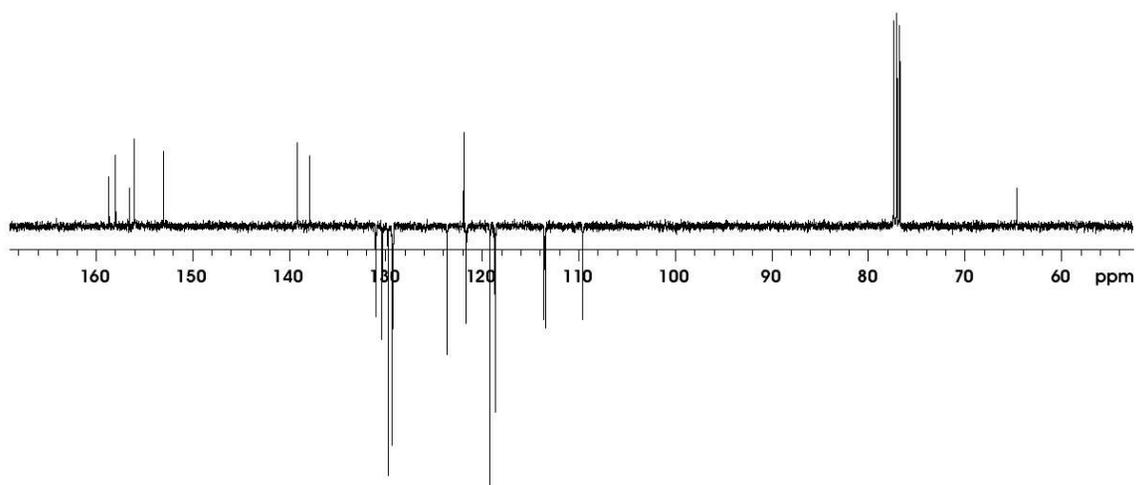


Figure SI-10. ¹³C-NMR spectrum of MTE monomer (**7b**)

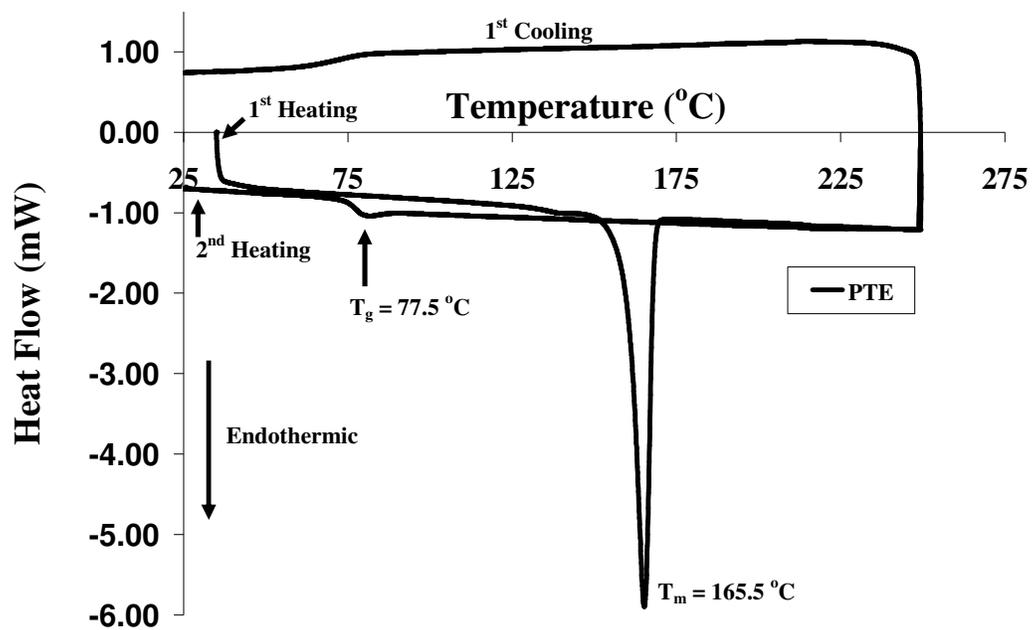


Figure SI-11. DSC analysis of PTE monomer at 10 °C / min

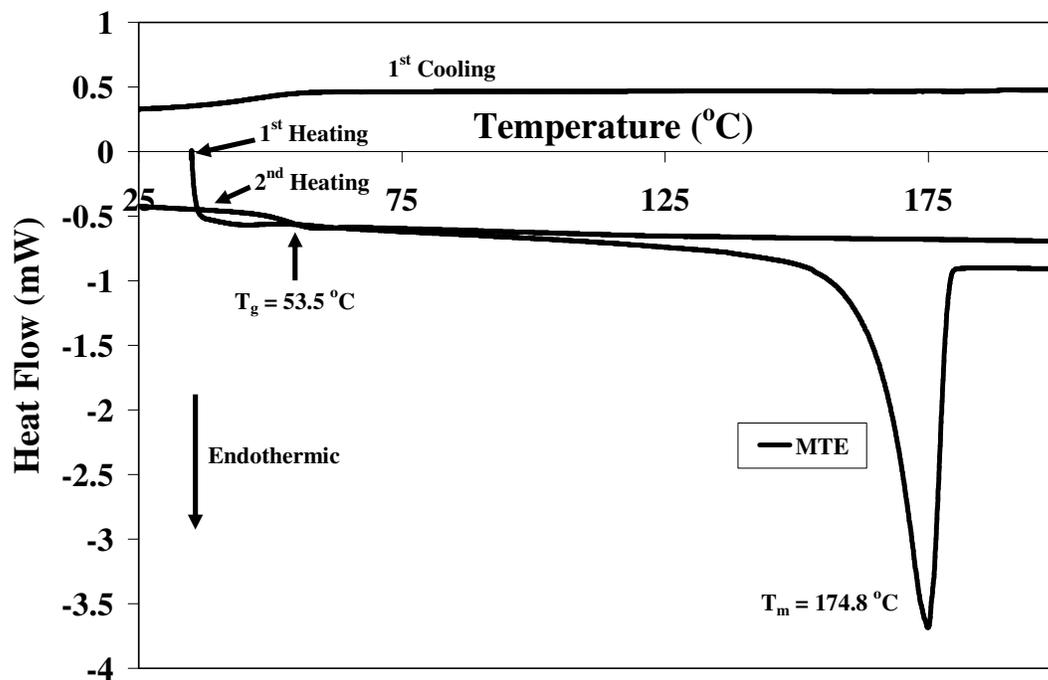


Figure SI-12. DSC analysis of MTE monomer at 10 °C / min

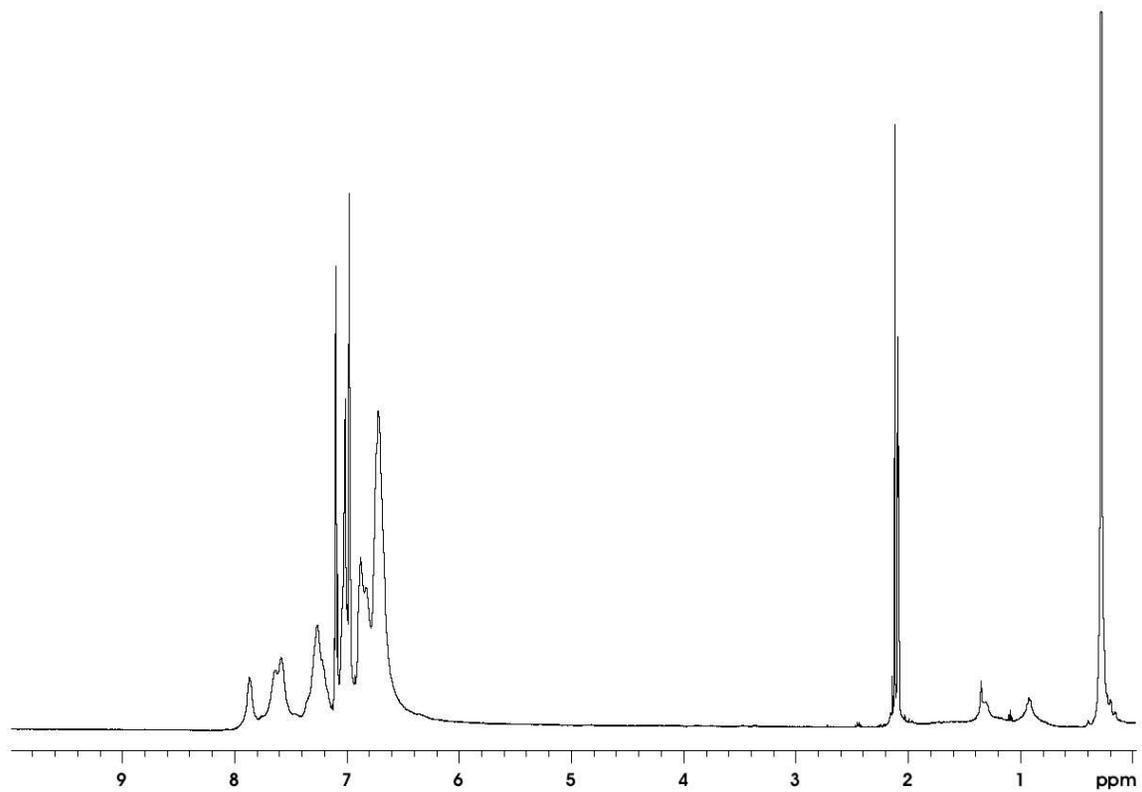


Figure SI-13. ¹H-NMR spectrum of PPTE (**8a**)

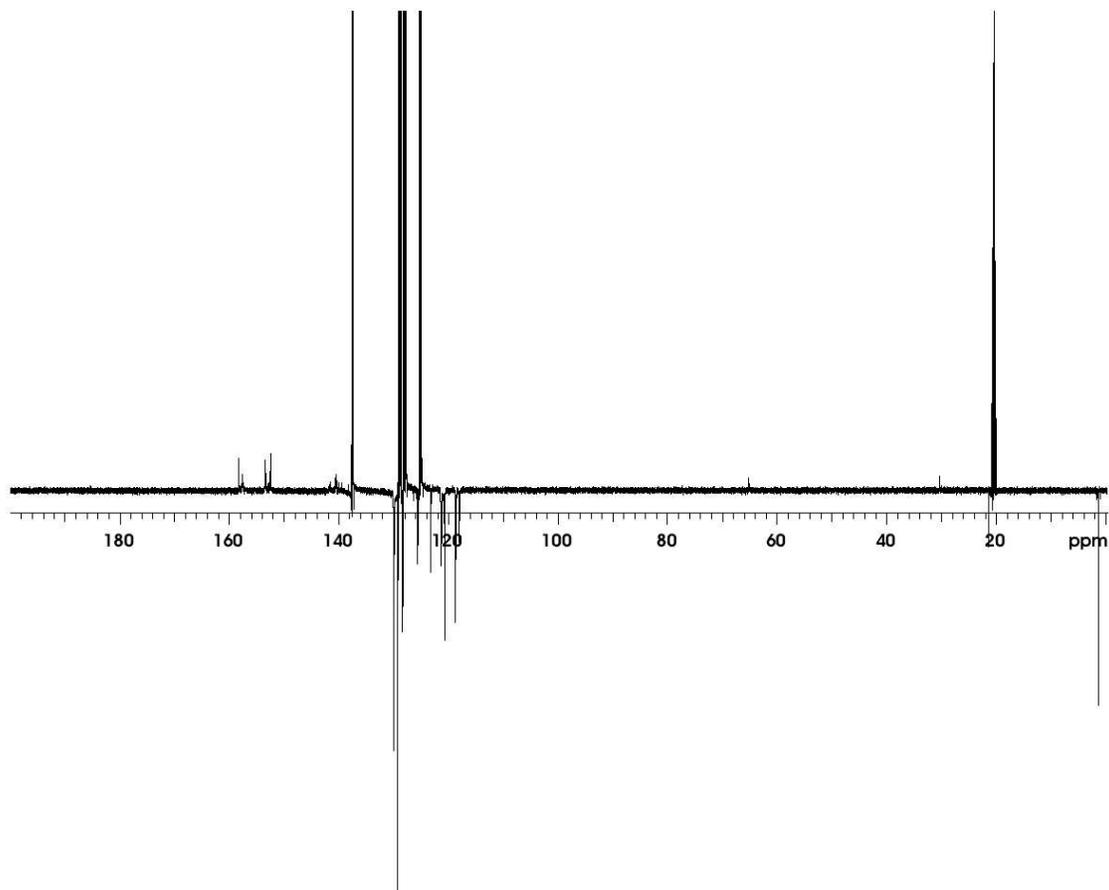


Figure SI-14. ^{13}C -NMR spectrum of PPTE (**8a**)

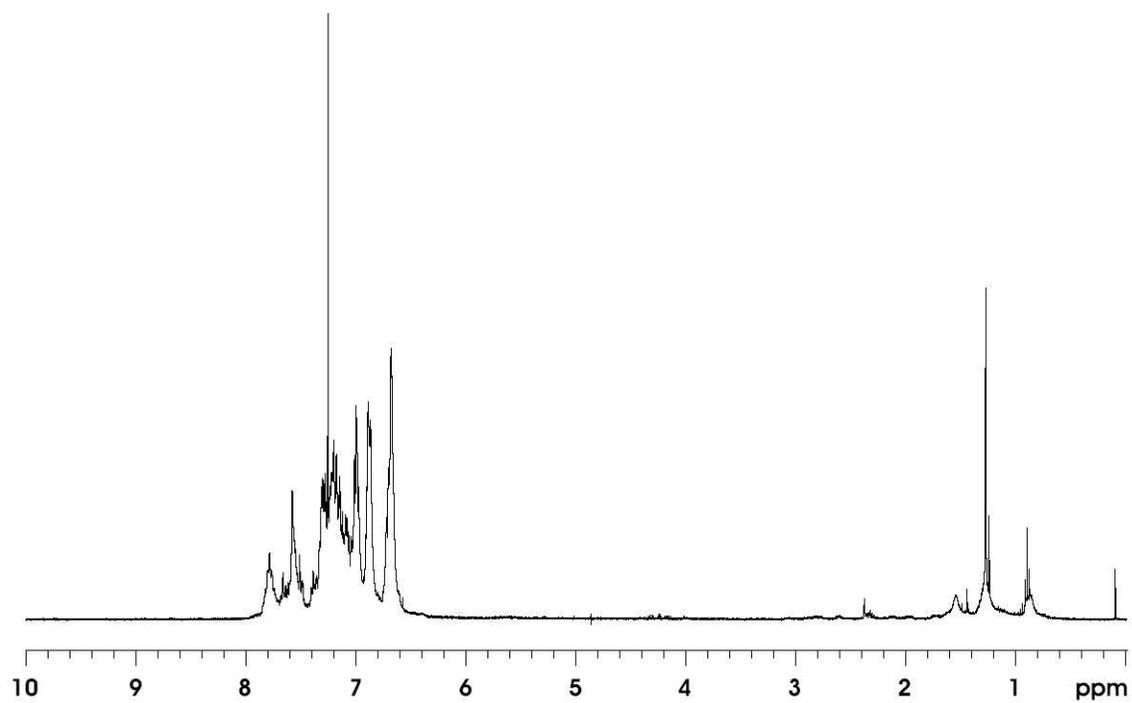


Figure SI-15. ¹H-NMR spectrum of PMTE (**8b**)

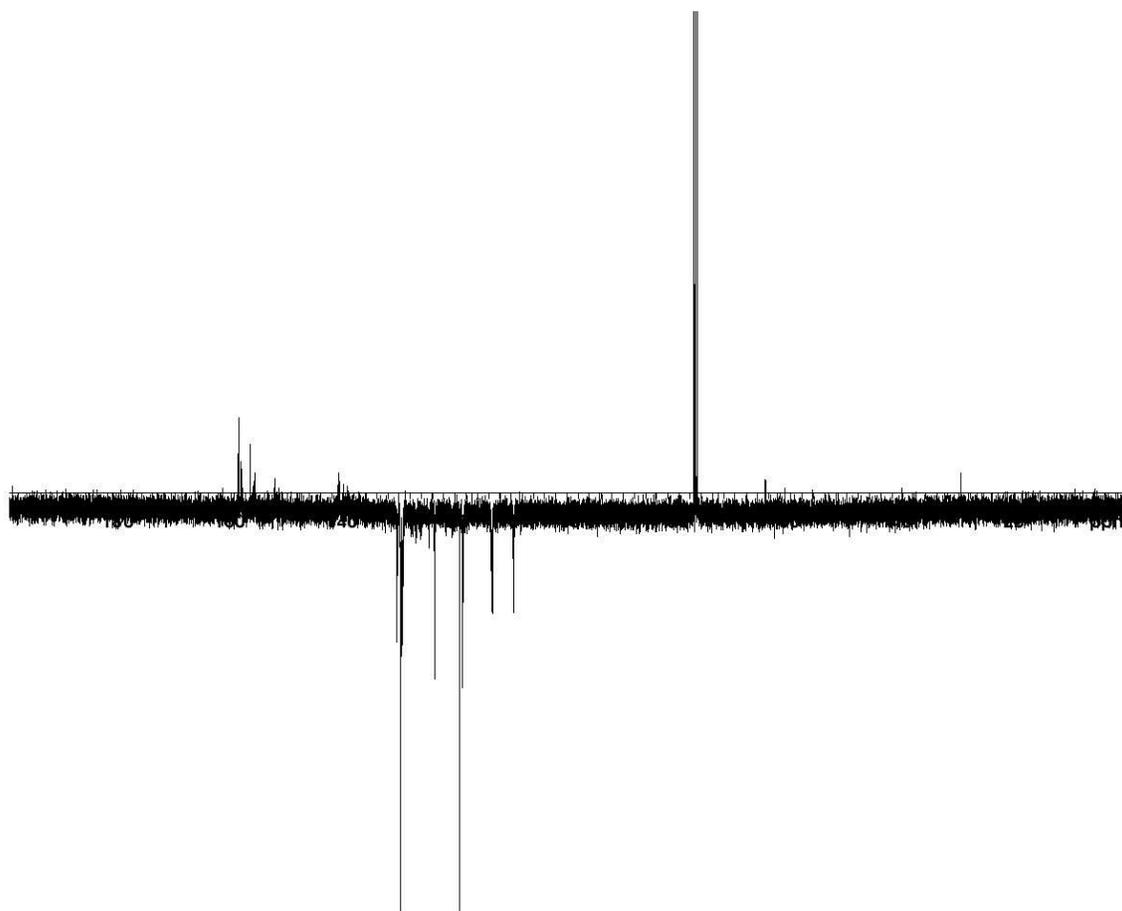
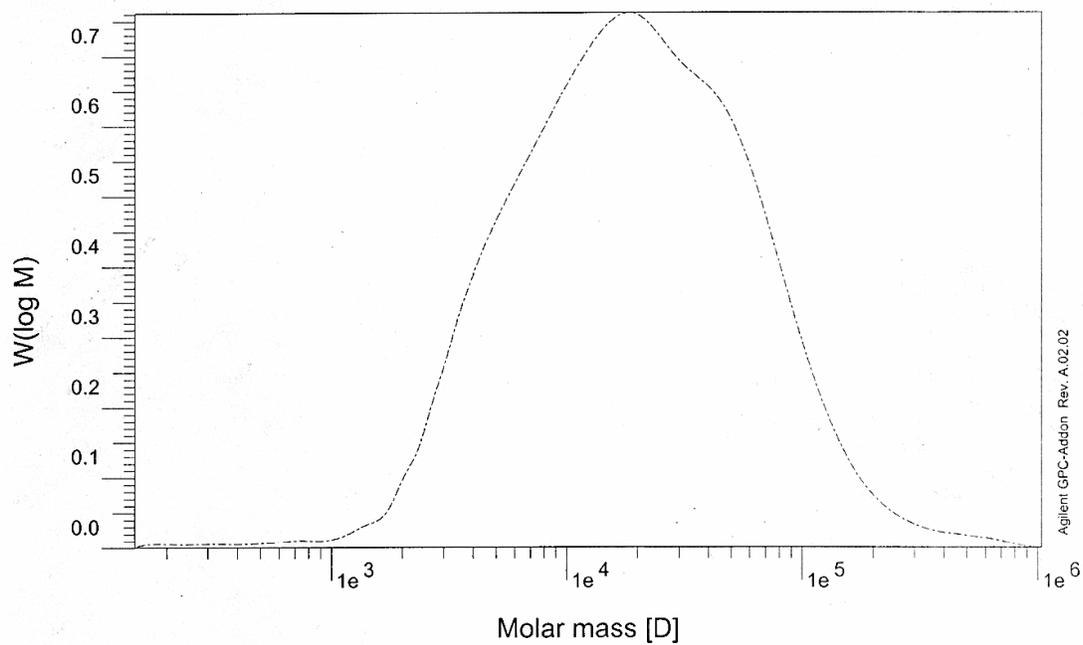


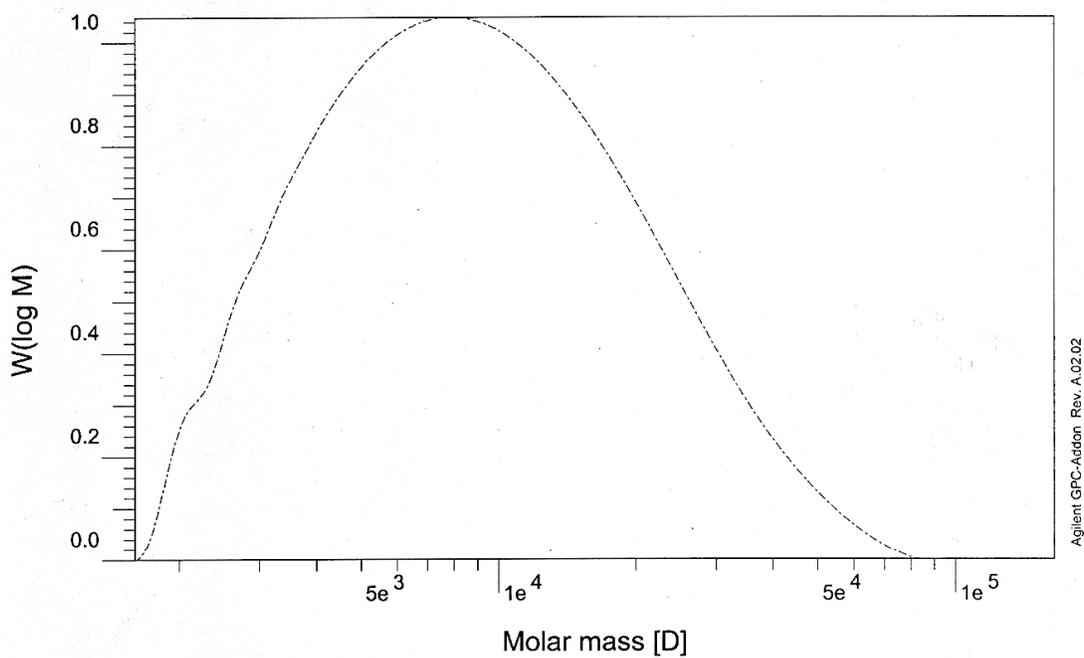
Figure SI-16. ^{13}C -NMR spectrum of PMTE (**8b**)



dad1B

Mn :	9.3595e3	g/mol
Mw :	3.6237e4	g/mol
Mz :	1.2689e5	g/mol
Mv :	0.000000	g/mol
D :	3.8717e0	
[n] :	0.000000	ml/g
Vp :	7.1180e0	ml
Mp :	1.8316e4	g/mol
A :	3.6688e2	ml*V
10%	4.2818e3	g/mol
30%	1.0015e4	g/mol
50%	1.8908e4	g/mol
70%	3.5879e4	g/mol
90%	8.0697e4	g/mol

Figure SI-17. GPC trace of PPTE (8a)



dad1B

Mn :	6.7022e3	g/mol
Mw :	1.2080e4	g/mol
Mz :	2.1176e4	g/mol
Mv :	0.000000	g/mol
D :	1.8024e0	
[n] :	0.000000	ml/g
Vp :	7.6153e0	ml
Mp :	7.8578e3	g/mol
A :	2.1294e2	ml*V
10%	3.1979e3	g/mol
30%	5.5086e3	g/mol
50%	8.6037e3	g/mol
70%	1.3665e4	g/mol
90%	2.5707e4	g/mol

Figure SI-18. GPC trace of PMTE (8b)

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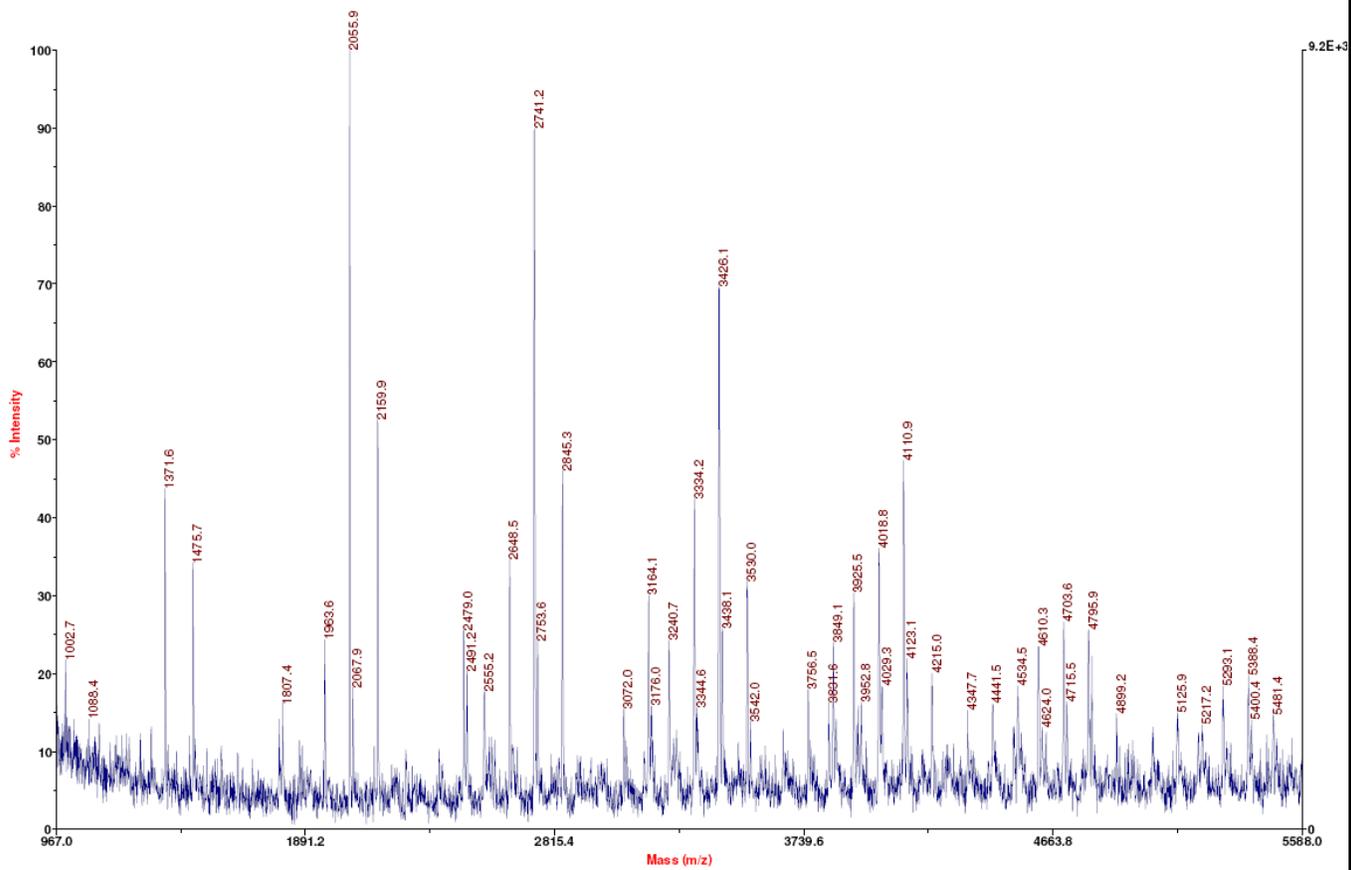


Figure SI-19. MALDI-TOF mass spectrum of PPTE (8a)

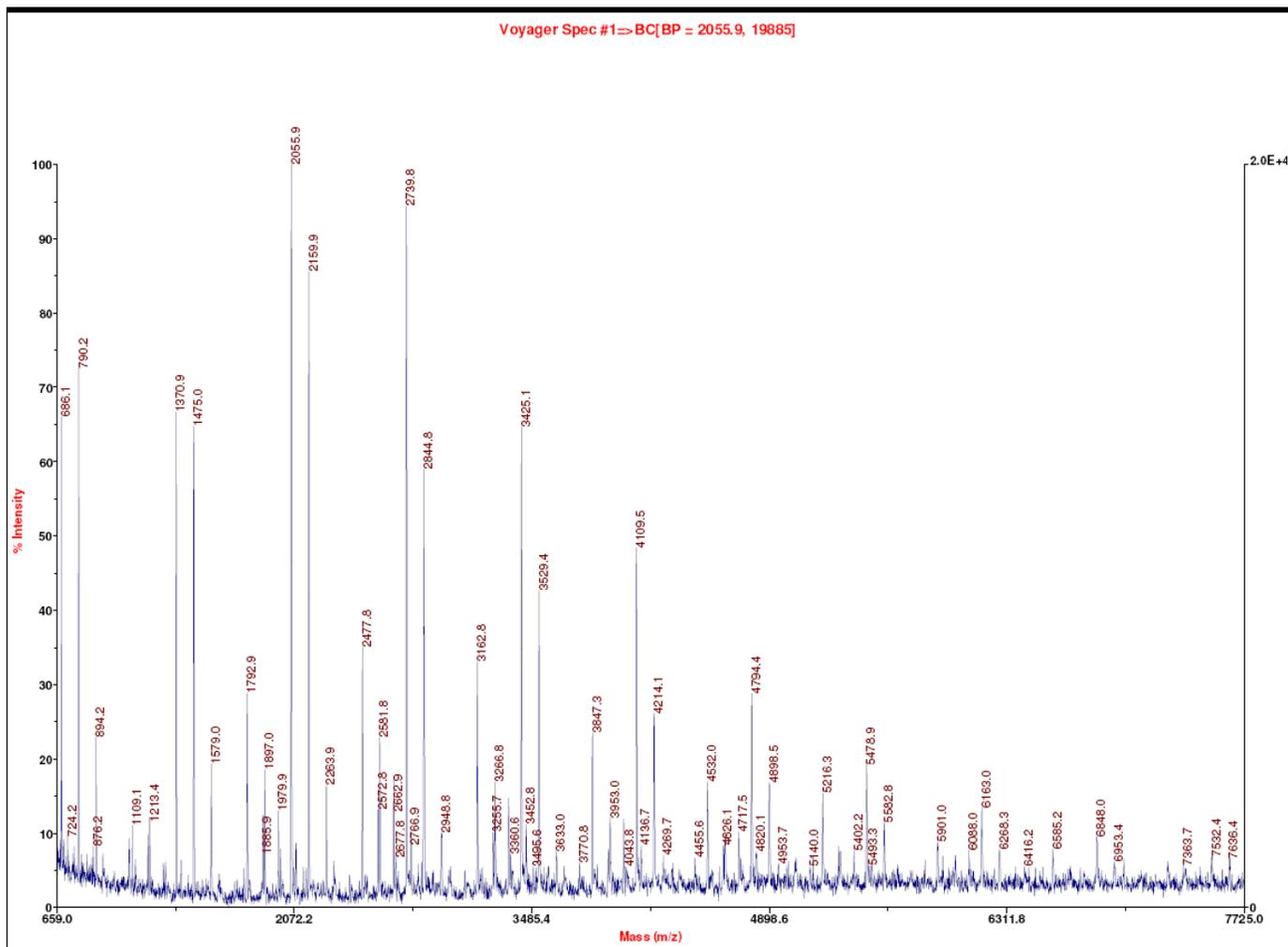


Figure SI-20. MALDI-TOF mass spectrum of PMTE (8b)

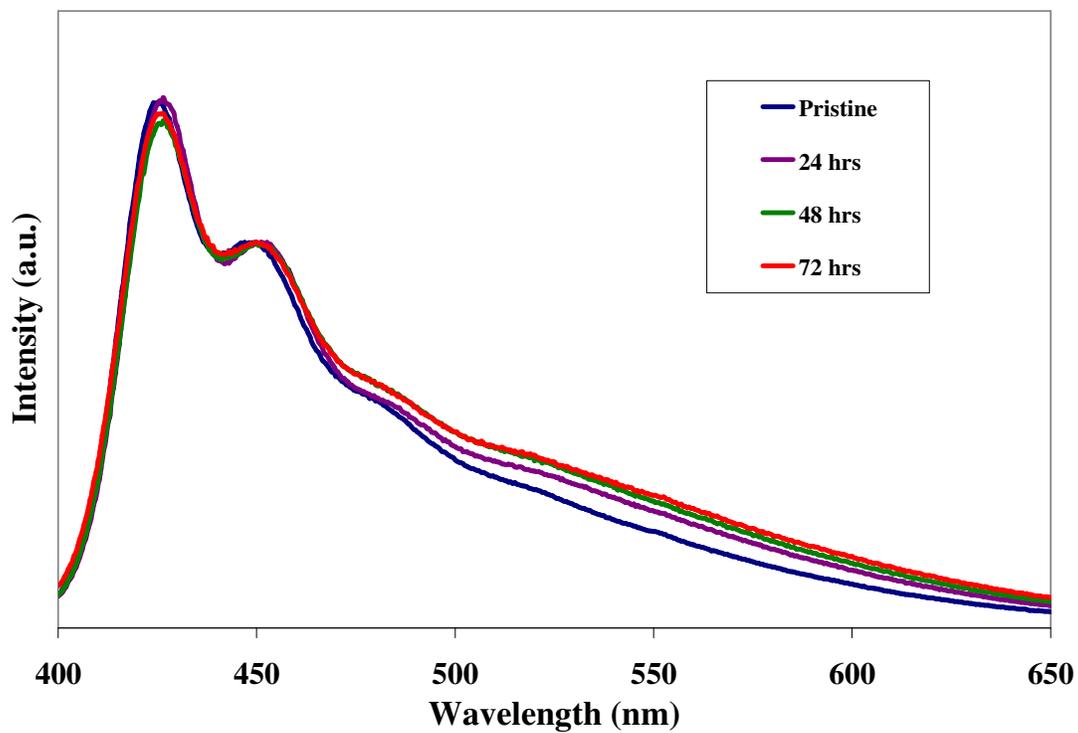


Figure SI-21. PL spectra ($\lambda_{\text{ex}}=350$ nm) of a spin-coated PMTE film annealed at 200 °C for various times in an N₂ filled glove-box.

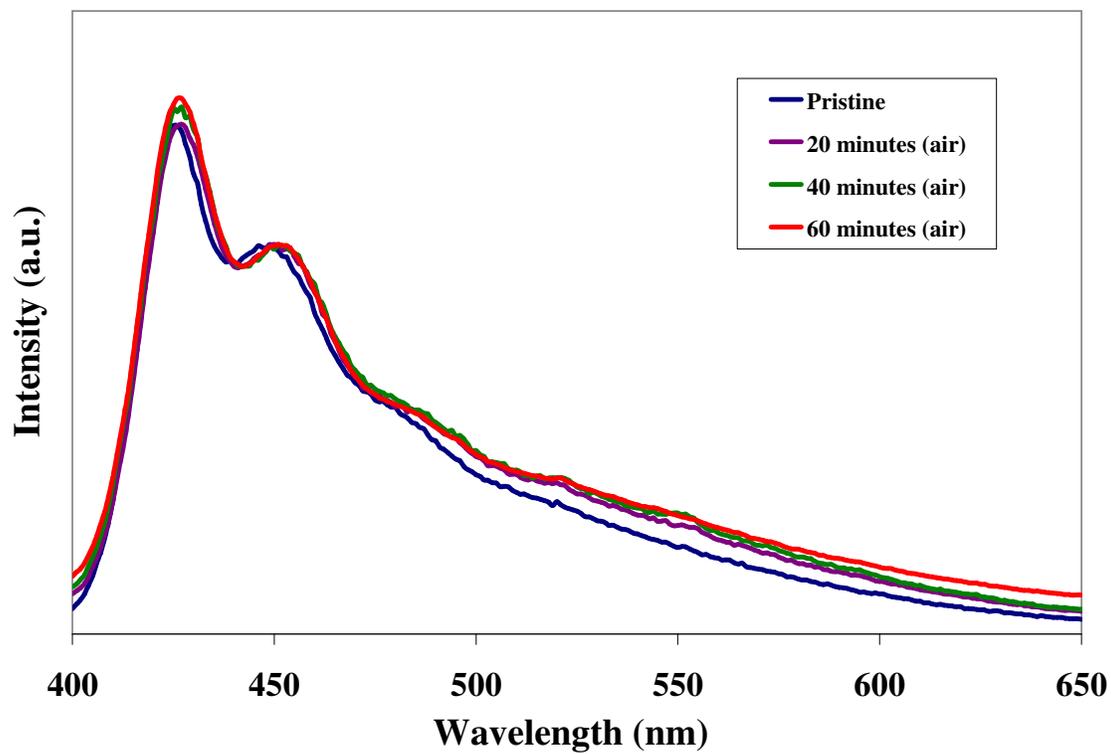


Figure SI-22. PL spectra ($\lambda_{\text{ex}}=350$ nm) of a spin-coated PMTE film annealed at 150 °C for various times under ambient conditions.