Degradable Nitric Oxide-Releasing Biomaterials via Post-Polymerization Functionalization of Crosslinked Polyesters

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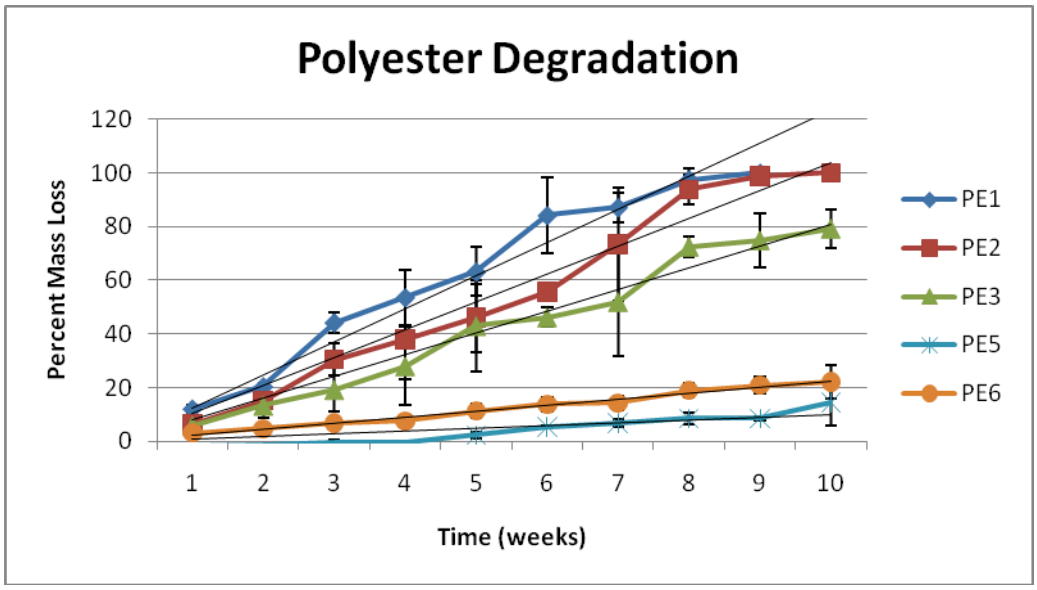

PE1: $y = 12.322x$; $R^2 = 0.9622$
PE2: $y = 10.377x$; $R^2 = 0.9721$
PE3: $y = 8.0609x$; $R^2 = 0.975$
PE5: $y = 0.9704x$; $R^2 = 0.7129$
PE6: $y = 2.2369x$; $R^2 = 0.9842$

Figure 1. Kinetic fits of polyester degradation for PE1, PE2, PE3, PE5 and PE6.

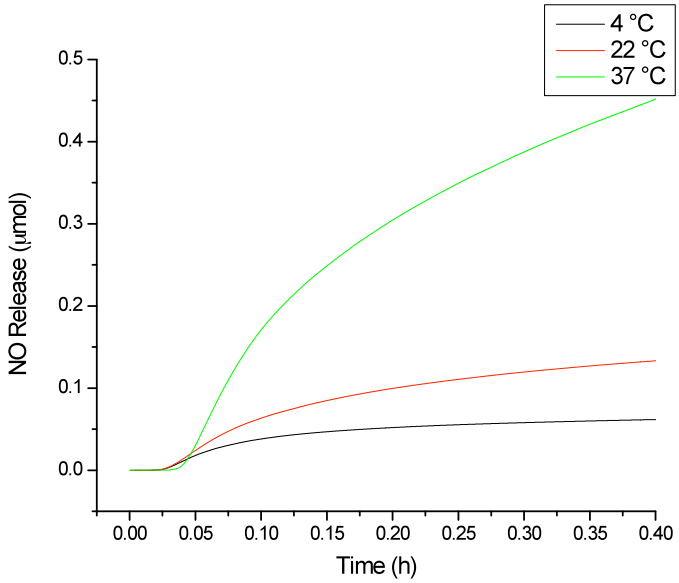

Figure 2. Temperature dependence of NO release for NPE1A.

Table 1. Thermal analysis for functionalized and nitrosated polyesters.

Sample	5% wt loss (°C)	10% wt loss (°C)
FPE1A	265	324
NPE1A	260	323
FPE1B	291	332
NPE1B	301	344
FPE2A	297	338
NPE2A	306	339
FPE2B	262	311
NPE2B	299	334
FPE3A	270	340
NPE3A	236	366
FPE3B	259	397
NPE3B	250	389
FPE4A	407	435
NPE4A	385	406
FPE4B	352	404
NPE4B	381	408
FPE5A	279	373
NPE5A	291	369
FPE6A	292	371
NPE6A	277	376

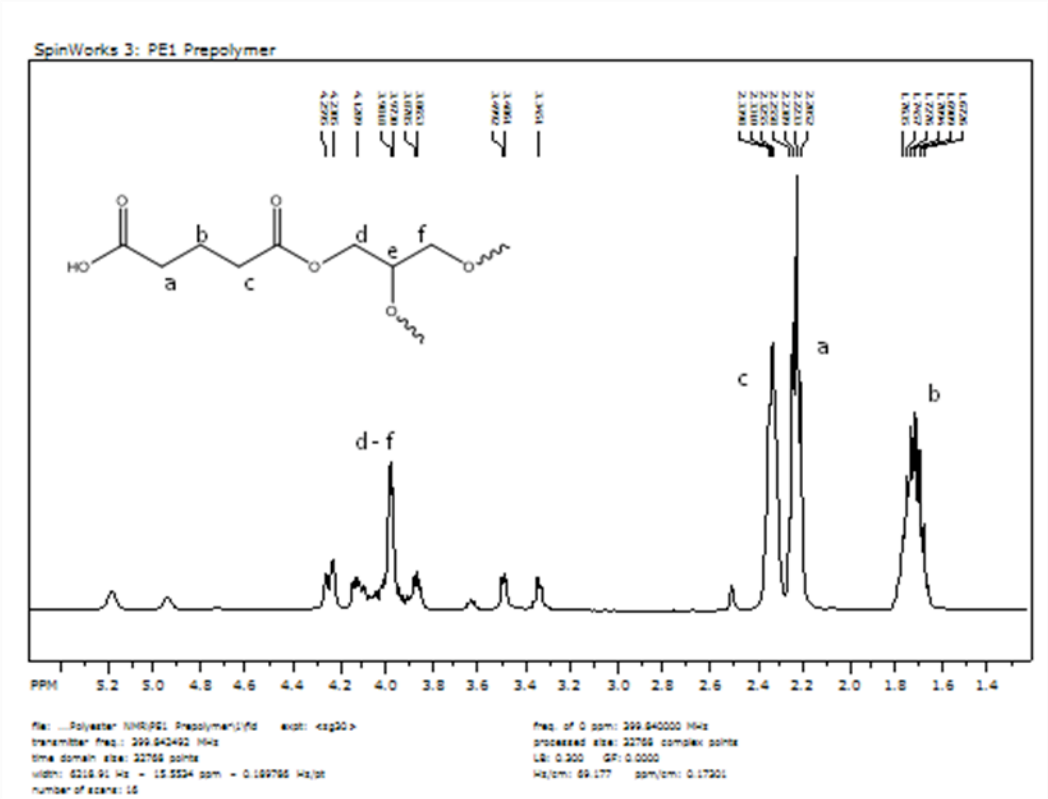

Figure 3. ^{1}H NMR spectra of PE1 prepolymer in DMSO – d_6.

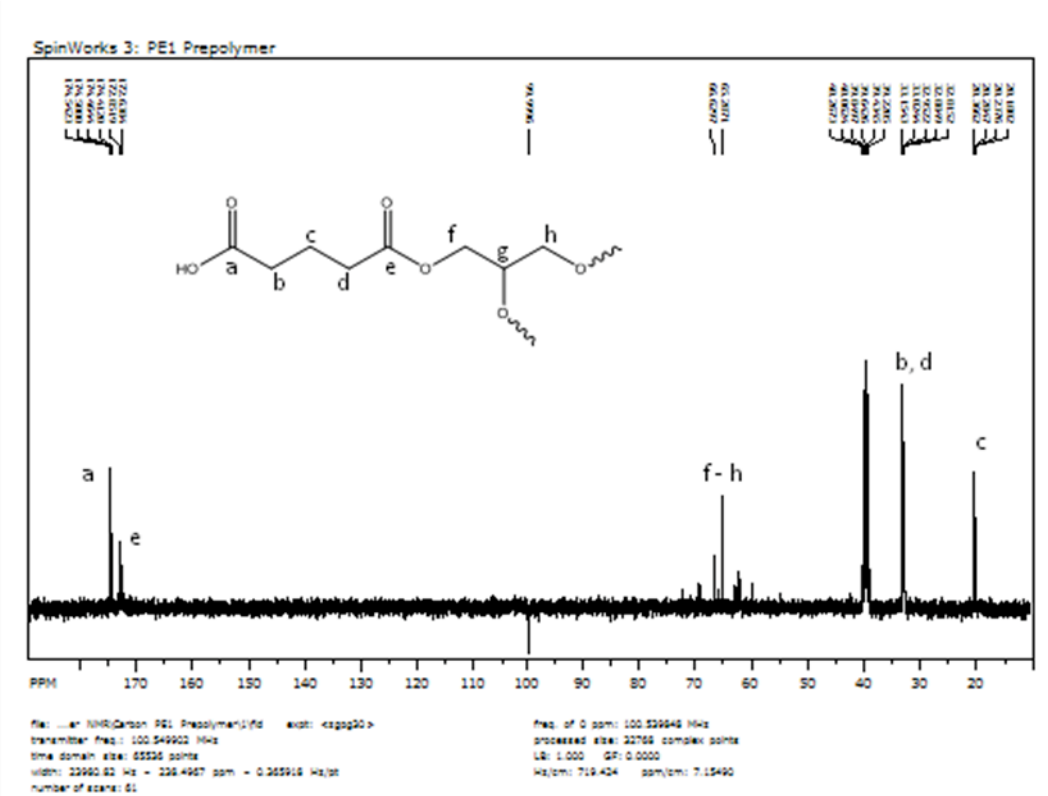

Figure 4. ^{13}C NMR spectra of PE1 prepolymer in DMSO – d_6.

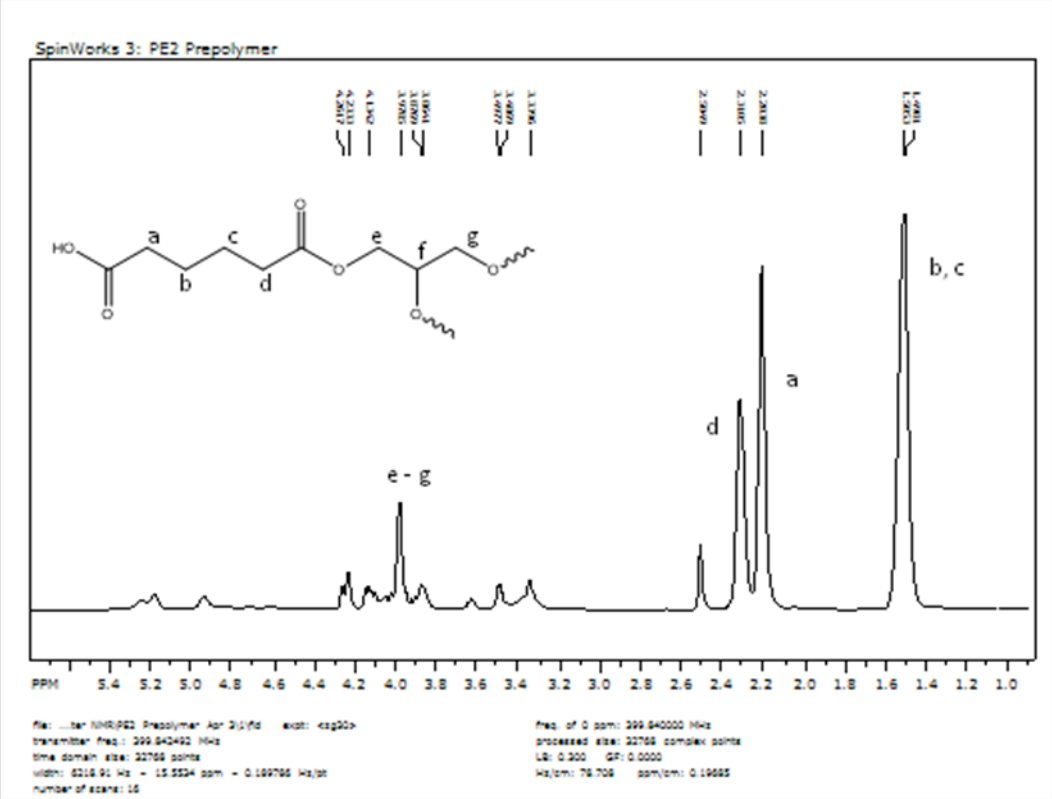

Figure 5. ^{1}H NMR spectra of PE2 prepolymer in DMSO – d_6.

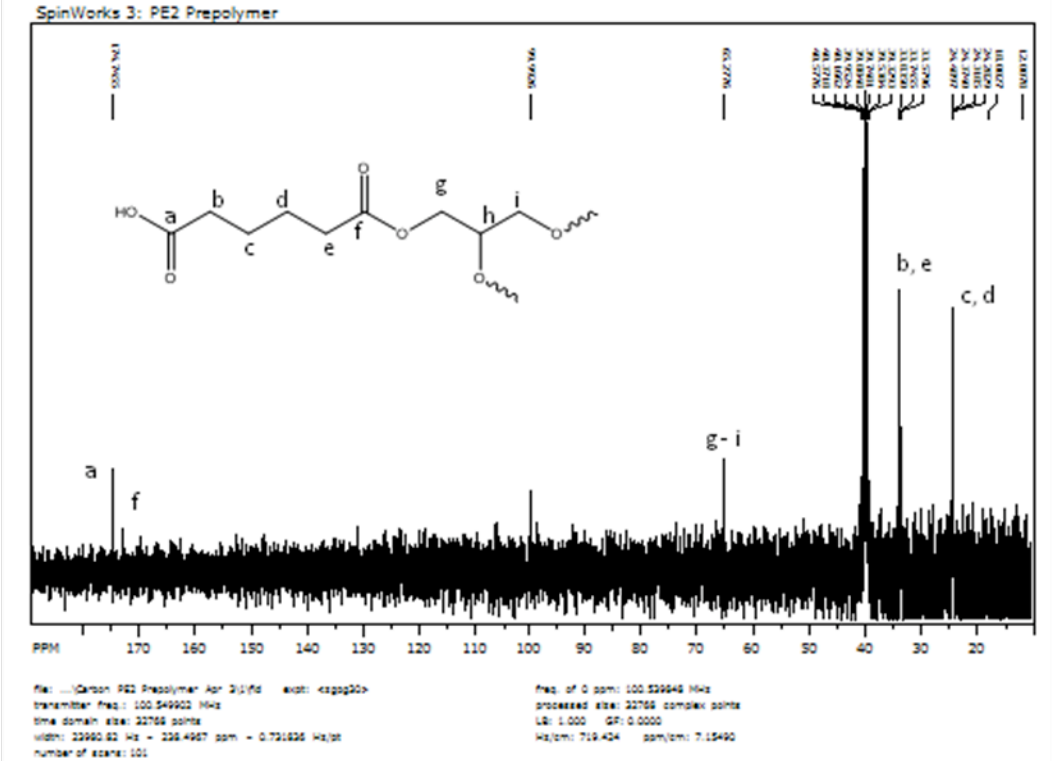

Figure 6. ^{13}C NMR spectra of PE2 prepolymer in DMSO – d_6.

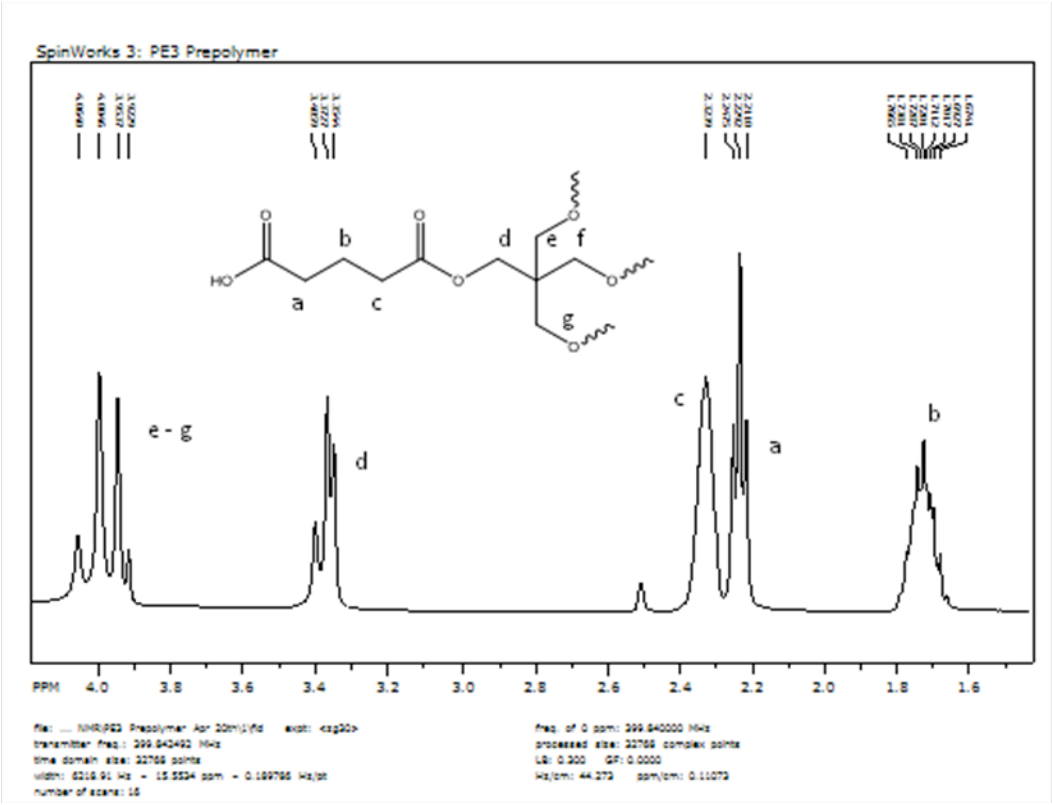

Figure 7. ^{1}H NMR spectra of PE3 prepolymer in DMSO – d_6.

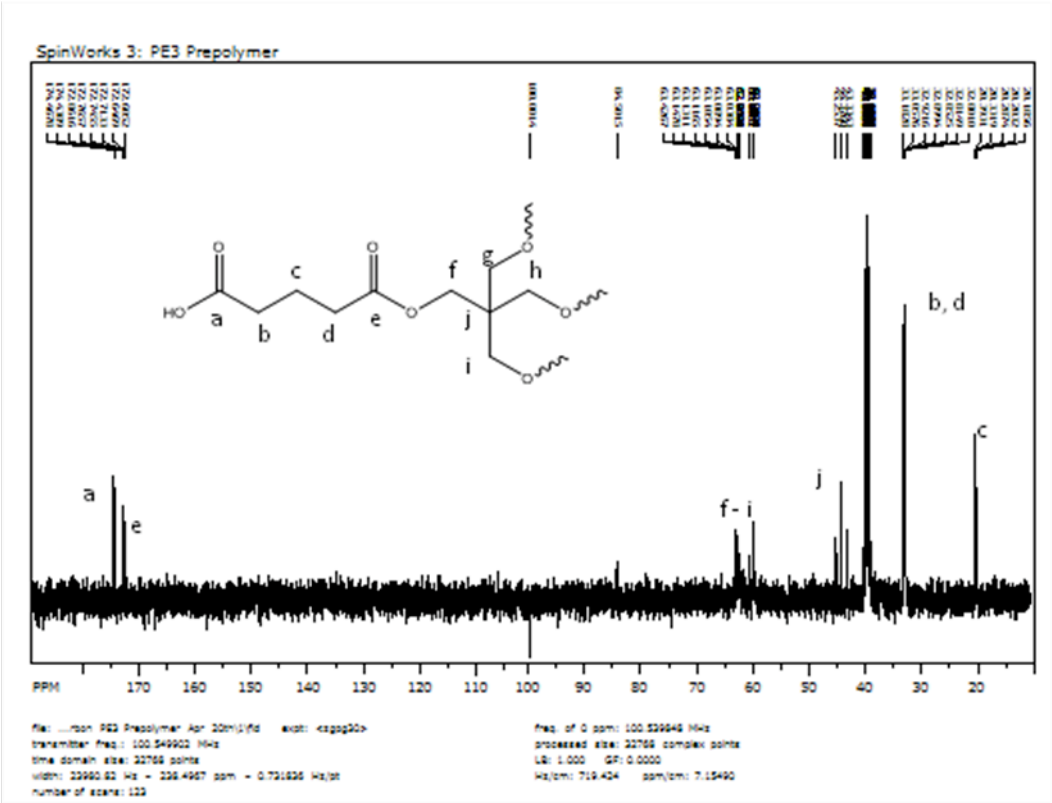

Figure 8. ^{13}C NMR spectra of PE3 prepolymer in DMSO – d_6.

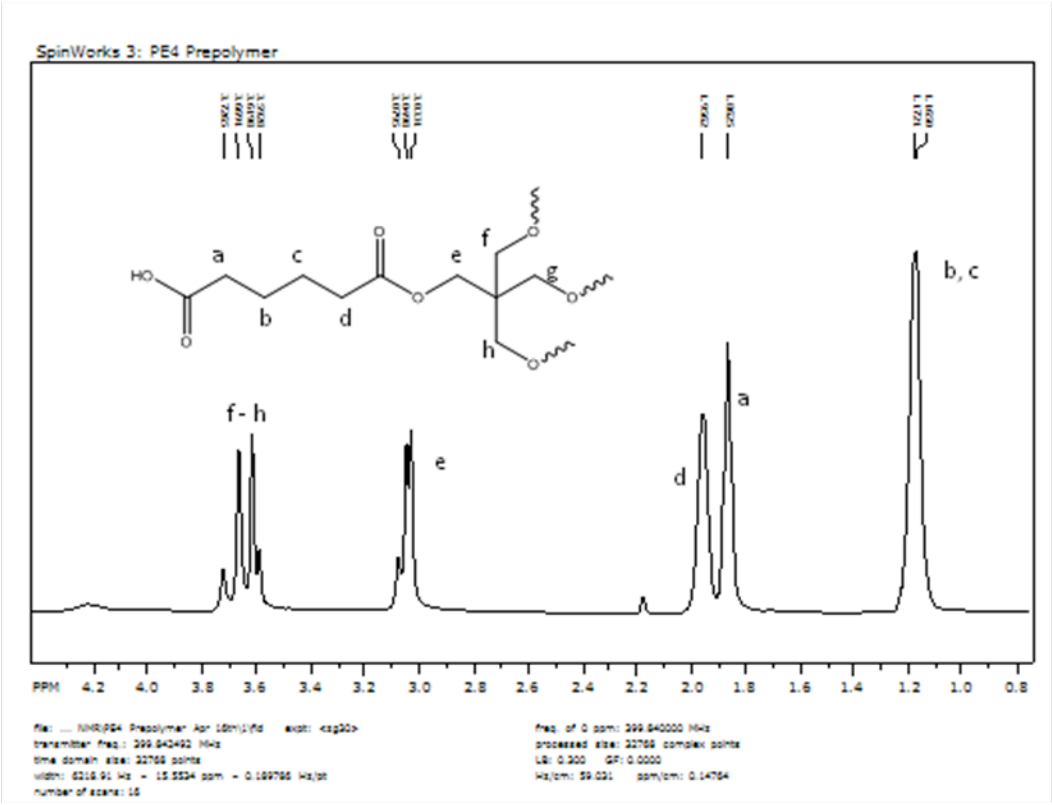

Figure 9. ^{1}H NMR spectra of PE4 prepolymer in DMSO – d_6.

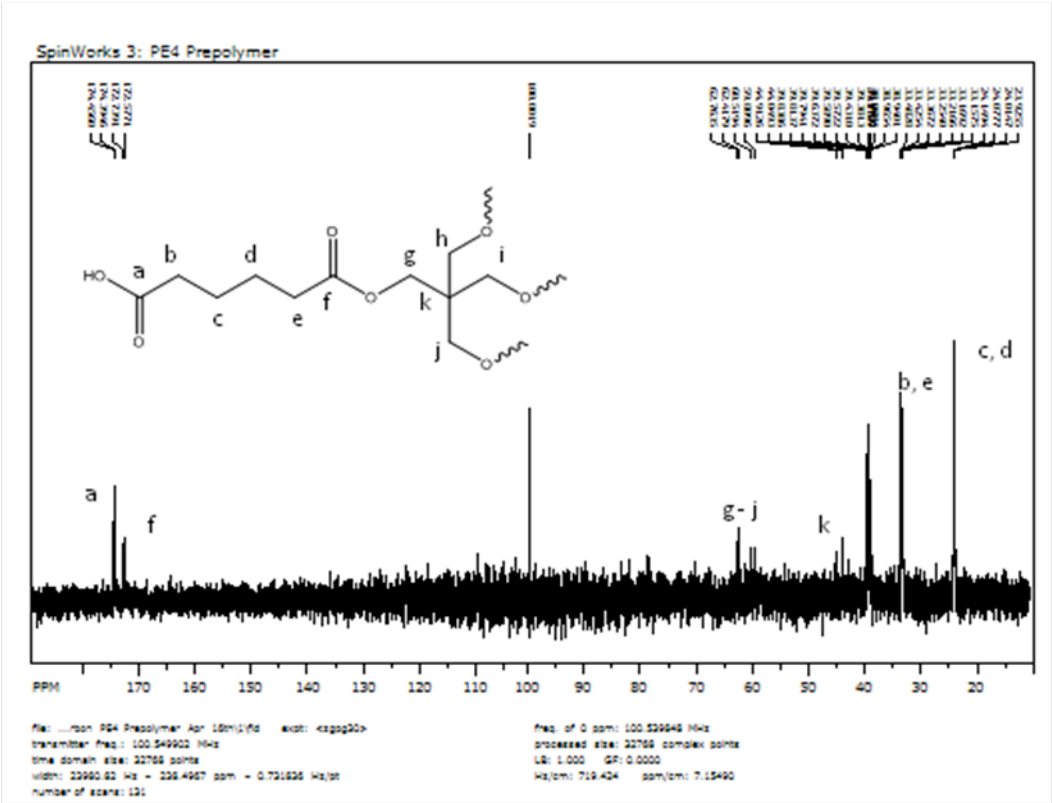

Figure 10. ^{13}C NMR spectra of PE4 prepolymer in DMSO – d_6.

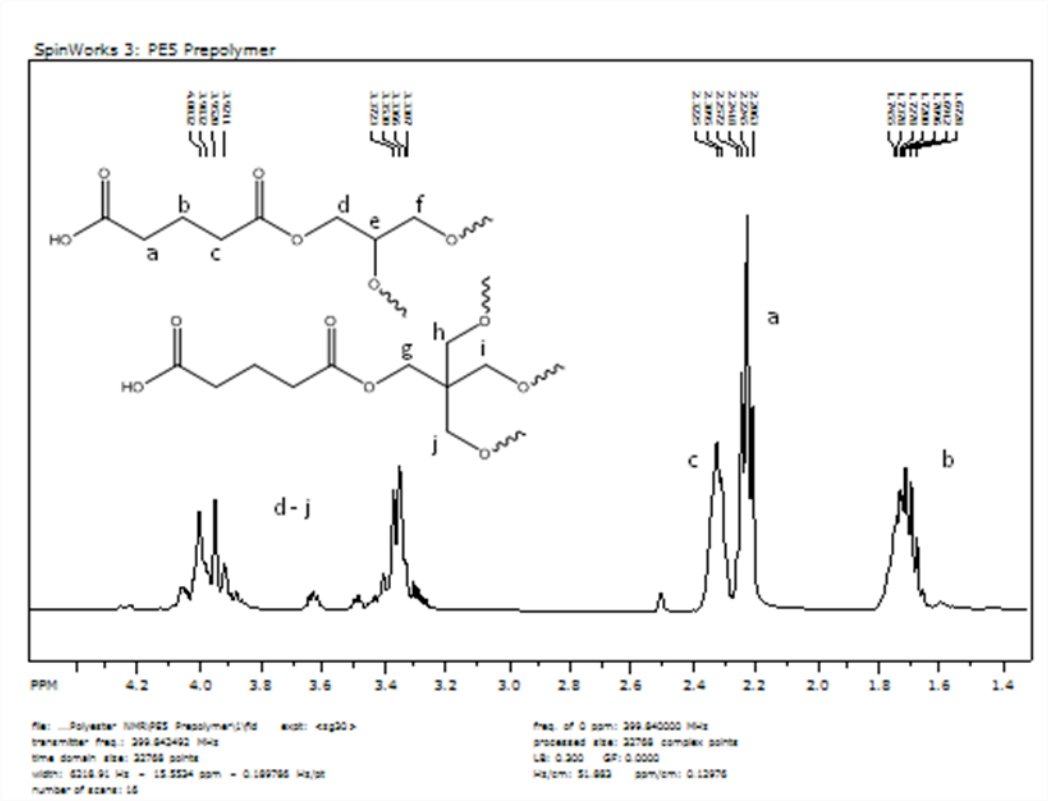

Figure 11. ^{1}H NMR spectra of PE5 prepolymer in DMSO – d_6.

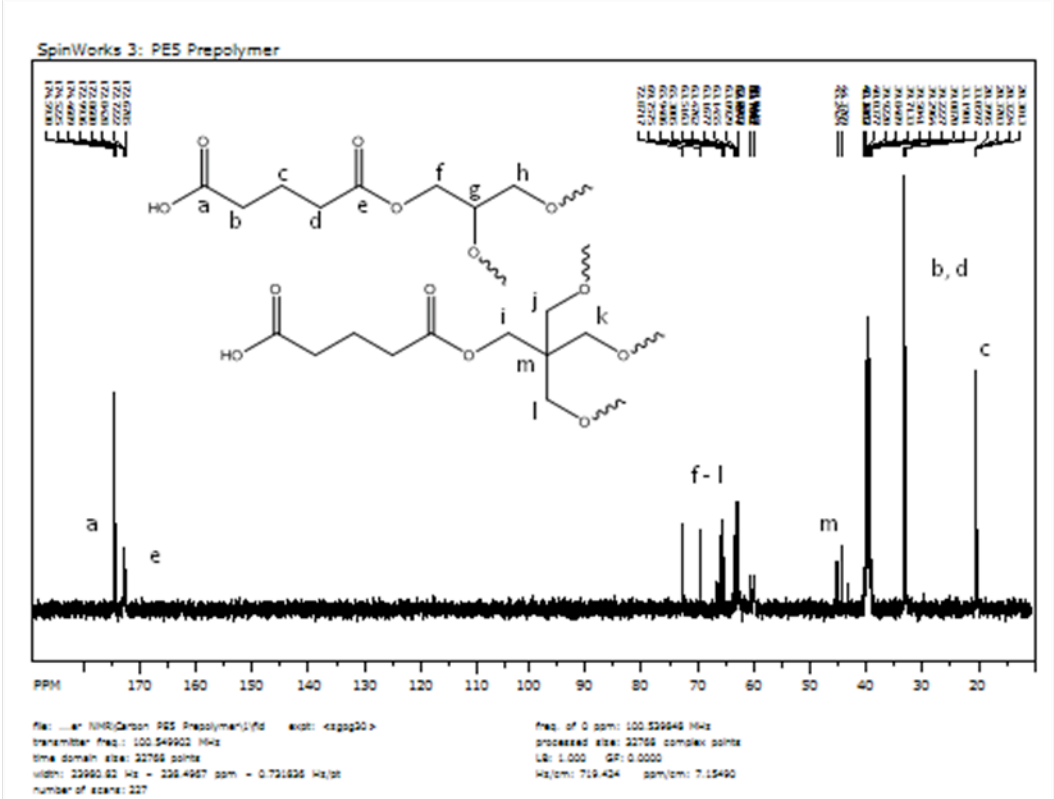

Figure 12. ^{13}C NMR spectra of PE5 prepolymer in DMSO – d_6.

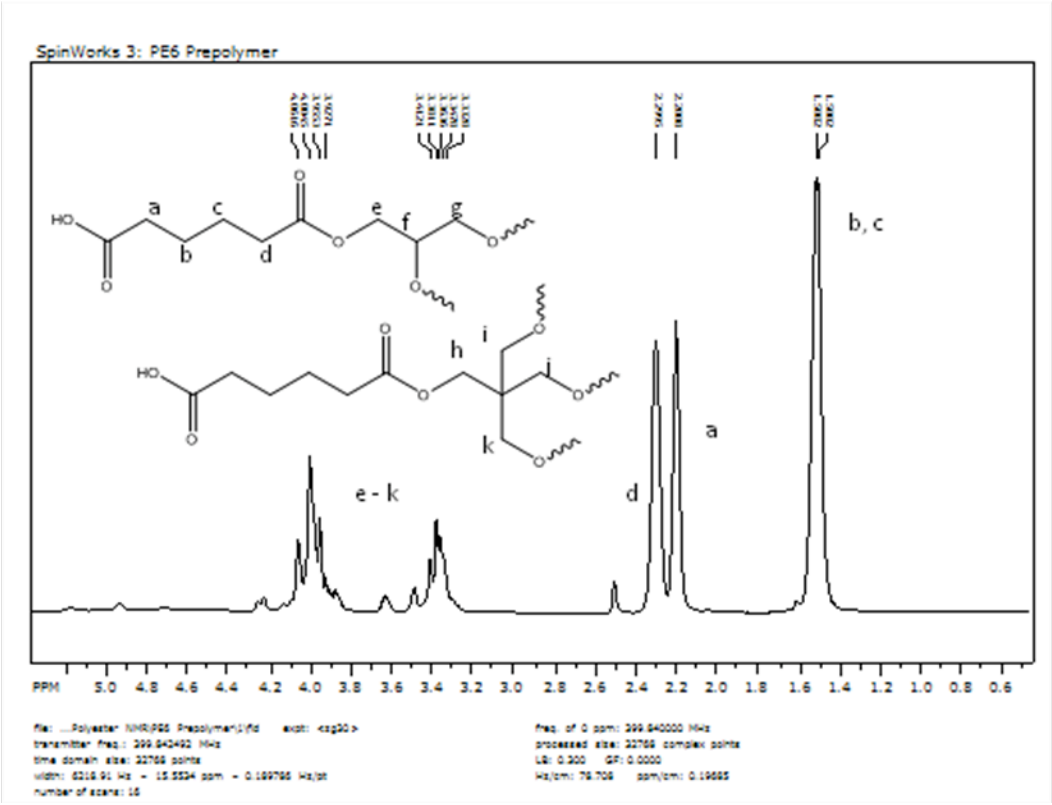

Figure 13. ^{1}H NMR spectra of PE6 prepolymer in DMSO – d_6.

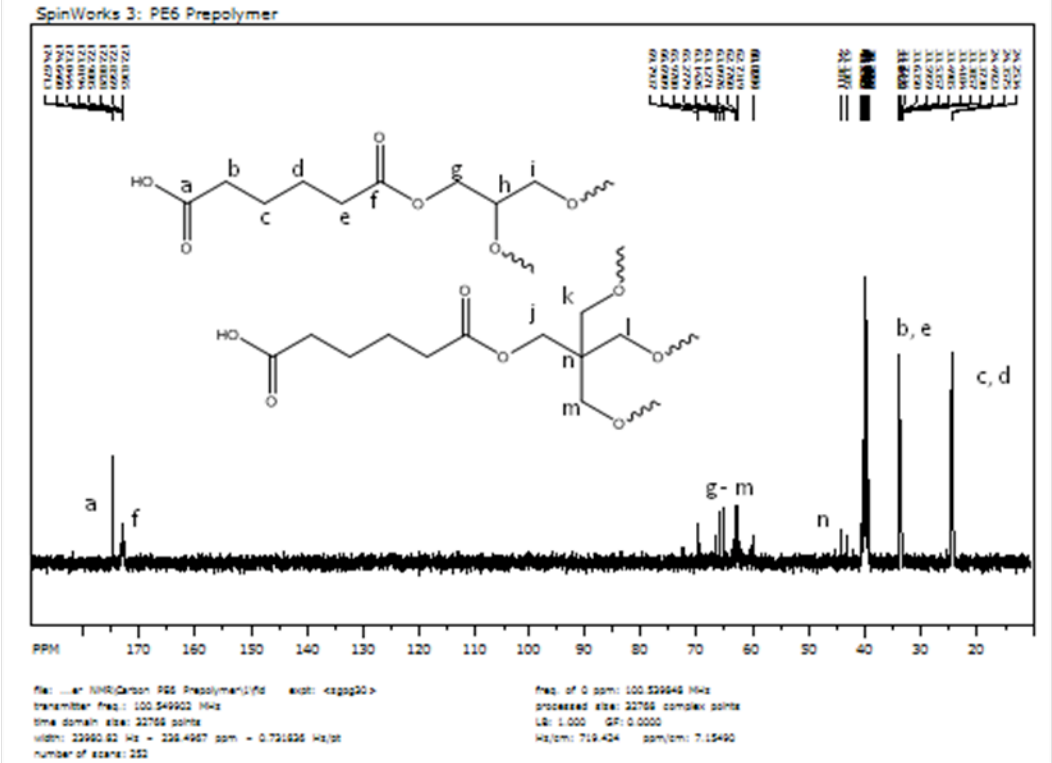

Figure 14. ^{13}C NMR spectra of PE6 prepolymer in DMSO – d_6.