Supporting information

Study on rubber toughening of aliphatic polyketone via poly(ether-block-amide)

Shichoon Lee and Younggon Son

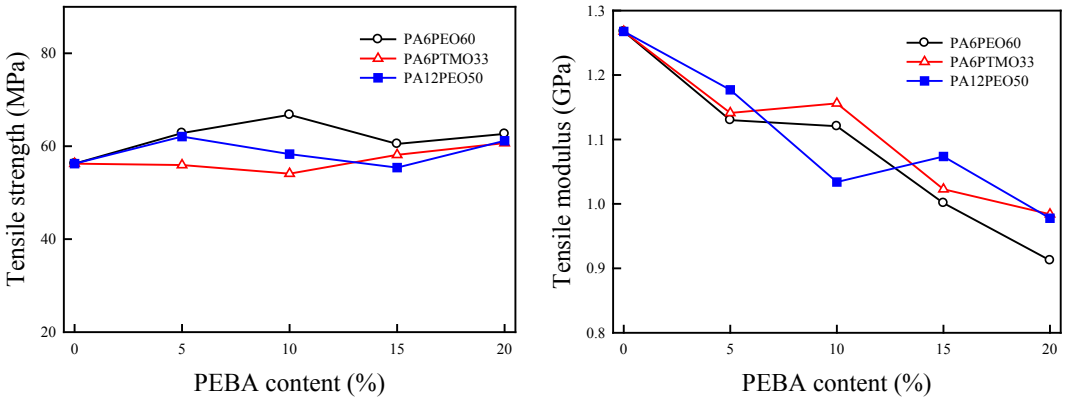
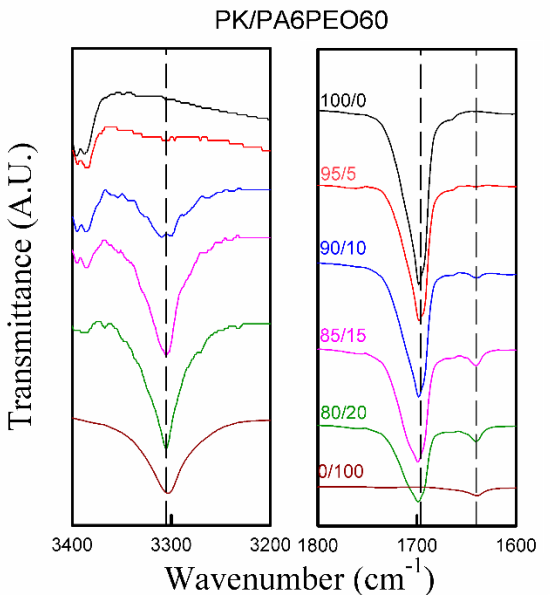
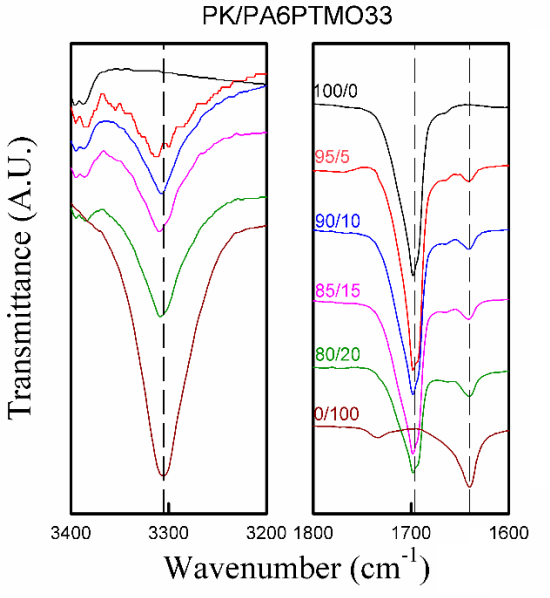


Fig. S1 Tensile test results of PK-H/PEBA blends. (a) Tensile strength of PK-H/PEBA, (b) Tensile modulus of PK-H/PEBA.


PK/PA6PEO60
Transmittance (A.U.)
100/0
95/5
90/10
85/15
80/20
0/100
3400
3300
3200
1800
1700
1600
Wavenumber (cm-1)

(a)


PK/PA6PTMO33
Transmittance (A.U.)
100/0
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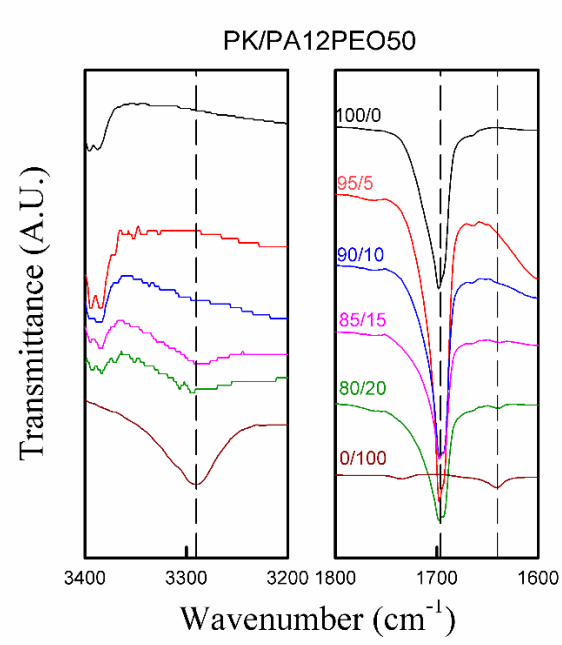
90/10
85/15
80/20
0/100
3400
3300
3200
1800
1700
1600
Wavenumber (cm-1)

(b)


PK/PA12PEO50
Transmittance (A.U.)
100/0
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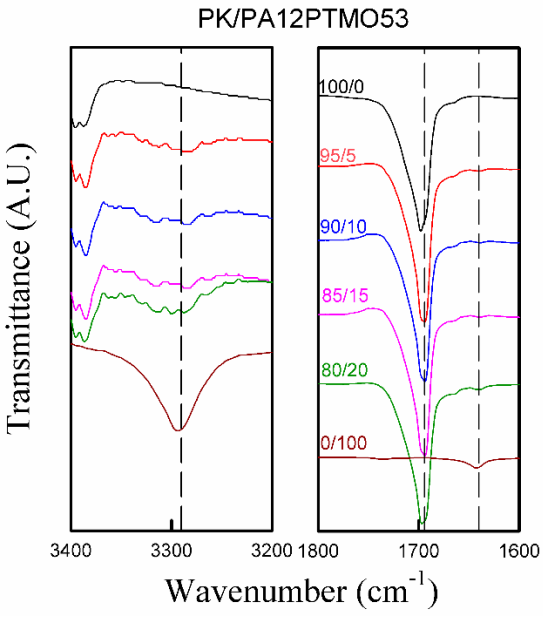
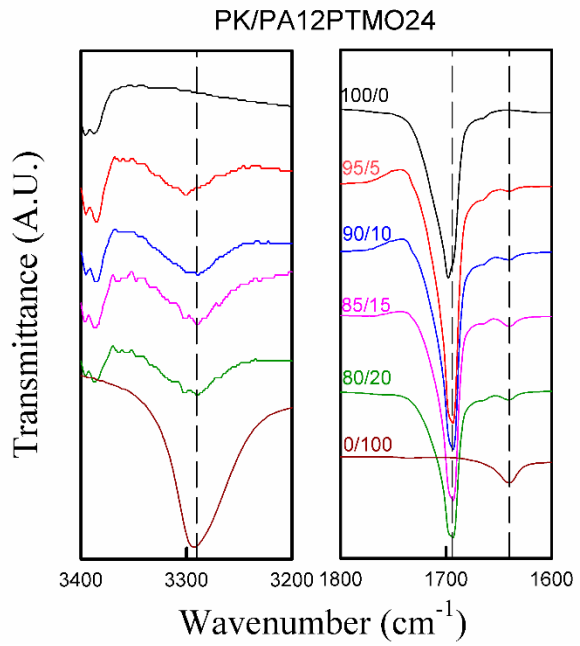
90/10
85/15
80/20
0/100
3400
3300
3200
1800
1700
1600
Wavenumber (cm-1)

(c)


PK/PA12PTMO53
Transmittance (A.U.)
100/0
95/5
90/10
85/15
80/20
0/100
3400
3300
3200
1800
1700
1600
Wavenumber (cm-1)

(d)



(e)

Fig. S2 FTIR spectra of PK-L/PEBA blends. (a) PK-L/PA6PEO60, (b) PK-L/PA6PTMO33, (c) PK-L/PA12PEO50 (d) PK-L/PA12PTMO53, (e) PK-L/PA12PTMO24

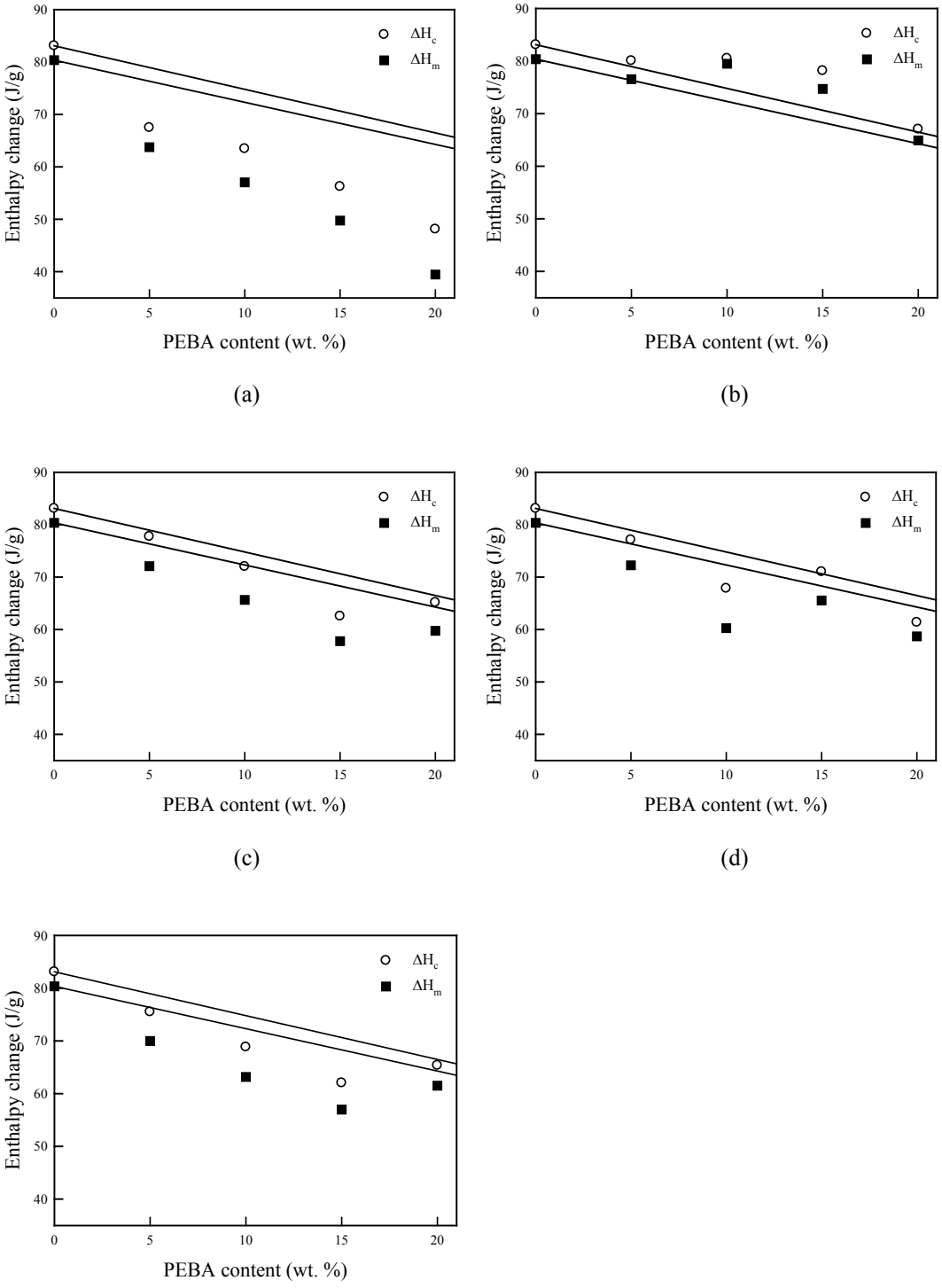


Fig. S3 ΔH_c and ΔH_m of PK-L and PK-L/PEBA blends. (a) PK-L/PA6PEO60, (b) PK-L/PA6PTMO33, (c) PK-L/PA12PEO50 (d) PK-L/PA12PTMO53, (e) PK-L/PA12PTMO24

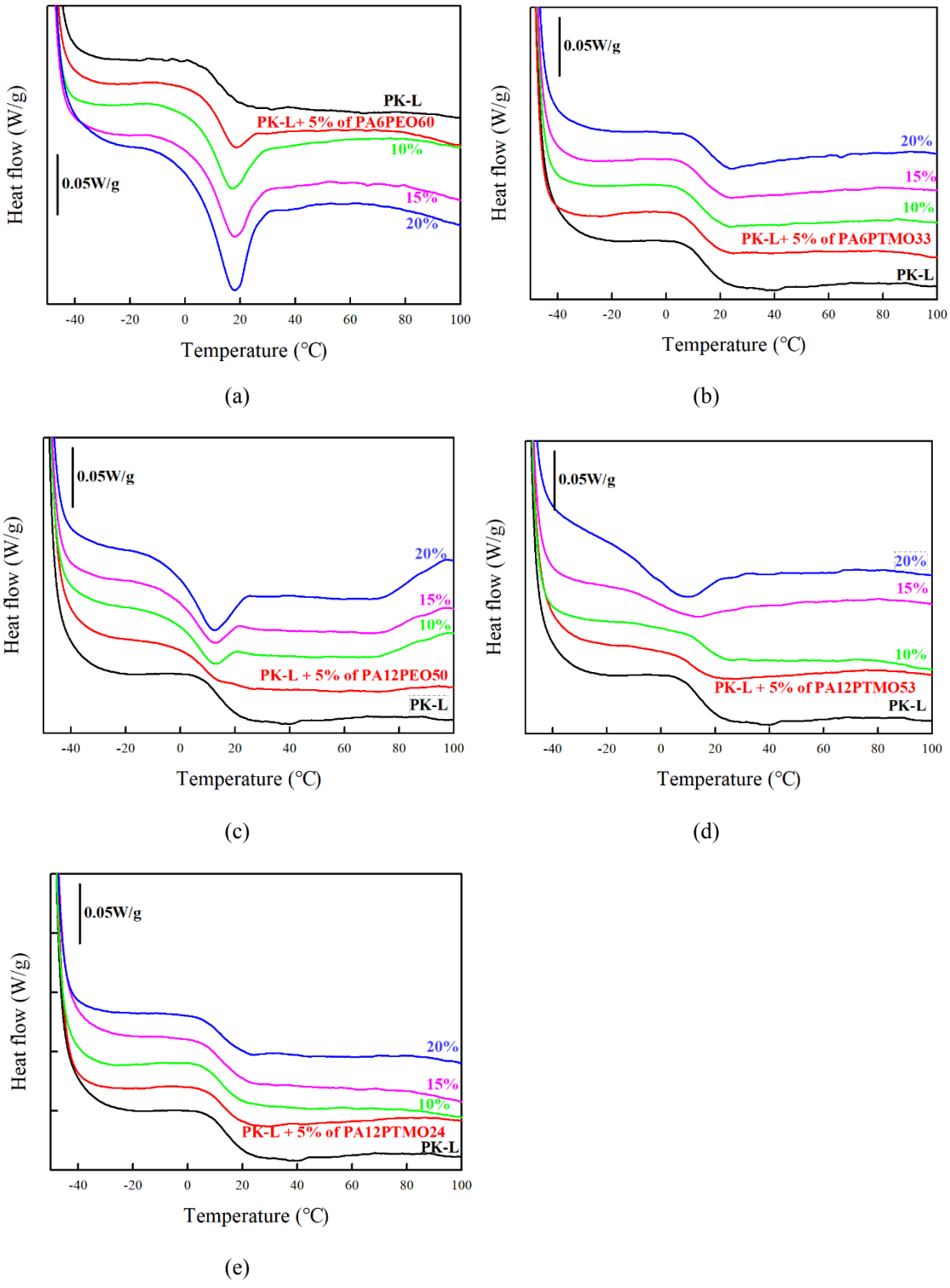


Fig. S4 DSC heating thernograms of PK-L and PK-L/PEBA blends near T_g of PK-L phase. (a) PK-L/PA6PEO60, (b) PK-L/PA6PTMO33, (c) PK-L/PA12PEO50 (d) PK-L/PA12PTMO53, (e) PK-L/PA12PTMO24