Table 1: Crystallinity(χ_c) and thermal stability of components in PCL/PLA blends

| Sample | χ _{PCL} (%) | $\chi_{PLA}(\%)$ | $T_m^{PCL}(^{\mathrm{o}}\mathrm{C})$ | $T_d^{PCL}(^{\mathrm{o}}\mathrm{C})$ | $\chi_{PCL}(\%)(WAXS)$ | $\chi_{PLA}(\%)(WAXS)$ | R(%) |
|--------|----------------------|------------------|--------------------------------------|--------------------------------------|------------------------|------------------------|------|
| 0% | 17.8 | 6.13 | 60.2 | | 27.65 | 4.81 | 9.48 |
| 25% | 21.6 | 4.77 | 60.3 | | 31.95 | 6.41 | 5.42 |
| 50% | 24.1 | 4.87 | 61.1 | | 34.00 | 7.84 | 5.81 |
| 75% | 23.3 | 5.60 | 59.2 | | 31.00 | 7.21 | 8.68 |
| 100% | 28.6 | 4.43 | 63.4 | | 33.20 | 4.56 | 9.34 |
| 125% | 28.8 | 5.17 | 62.0 | | 30.09 | 6.96 | 7.98 |

 $[\]chi_c$ calculated using Δ_m^c of PCL of 139.5(J·g⁻¹), Δ_m^c of PLA of 79(J·g⁻¹). In MDI jade, R is the *residual errors of fit* when crystallinity was calculated.

Table 2: SAXS analysis of PCL/PLA blends

| Sample | $\mathbf{q}(\mathrm{nm}^{-1})$ | Lamllar width(nm) | Herman factor |
|--------|--------------------------------|-------------------|---------------|
| 0% | 0.3663 | 17.15 | 0.2841 |
| 25% | 0.3948 | 15.91 | 0.2323 |
| 50% | 0.3948 | 15.91 | 0.2709 |
| 75% | 0.3995 | 15.72 | 0.3236 |
| 100% | 0.3901 | 16.10 | 0.4562 |
| 125% | 0.3922 | 16.02 | 0.5971 |

Table 3: Dynamic properties of the PCL/PLA blends

| Sample | Young's Modulus(Mpa) | Tensile Strength(Mpa) | Elongation at break(%) |
|--------|----------------------|-----------------------|------------------------|
| 0% | 3799 | 12.14 | 13.26 |
| 25% | 4239 | 13.56 | 9.406 |
| 50% | 4880 | 17.99 | 10.43 |
| 75% | 6017 | 21.30 | 9.893 |
| 100% | 7499 | 18.75 | 9.573 |
| 125% | 5730 | 20.10 | 7.667 |