

Supporting information

Universality in Interior Periodic Assembly of Banded D-(-)-Poly(3-hydroxybutyrate) Justified with Iridescence Tests

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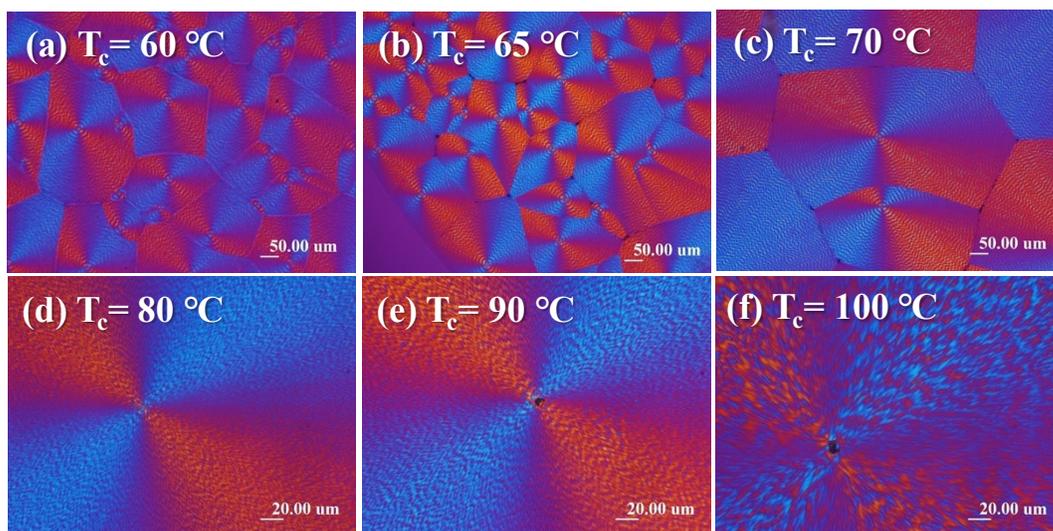


Figure S1. POM graphs of neat PHB spherulites (not blended with any diluents) crystallized at various T_c 's = (a) $60\text{ }^\circ\text{C}$, (b) $65\text{ }^\circ\text{C}$, (c) $70\text{ }^\circ\text{C}$, (d) $80\text{ }^\circ\text{C}$, (e) $90\text{ }^\circ\text{C}$, (f) $100\text{ }^\circ\text{C}$, all showing irregular ring patterns.

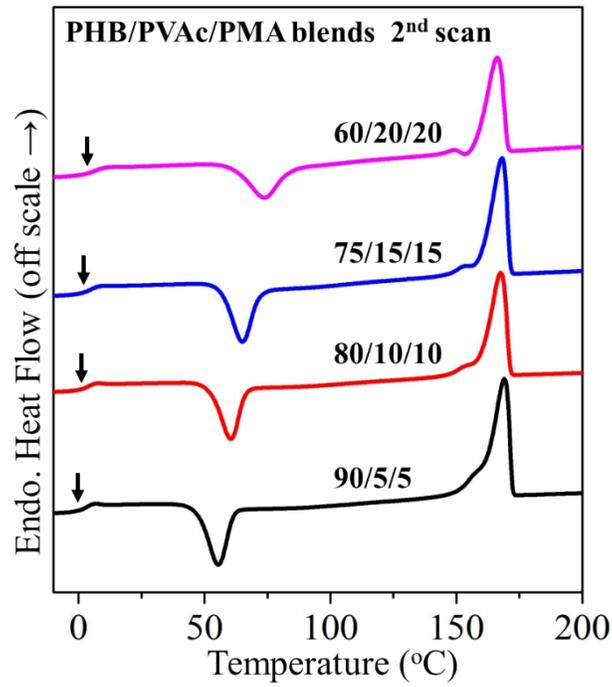


Figure S2. DSC traces of PHB/PVAc/PMA blends of different compositions (scanning rate = 20 °C/min).

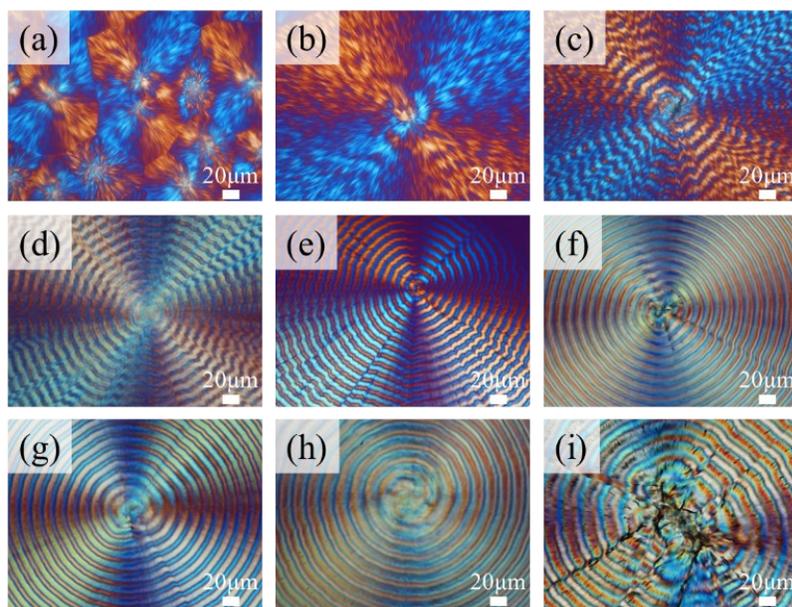


Figure S3. POM graphs of PHB/PVAc/PMA (80/10/10) blend crystallized at $T_c =$ (a) 60 °C, (b) 70 °C, (c) 80 °C, (d) 90 °C, (e) 95 °C, (f) 100 °C, (g) 105 °C, (h) 110 °C, and (i) 120 °C [scale bar = 20 μm].

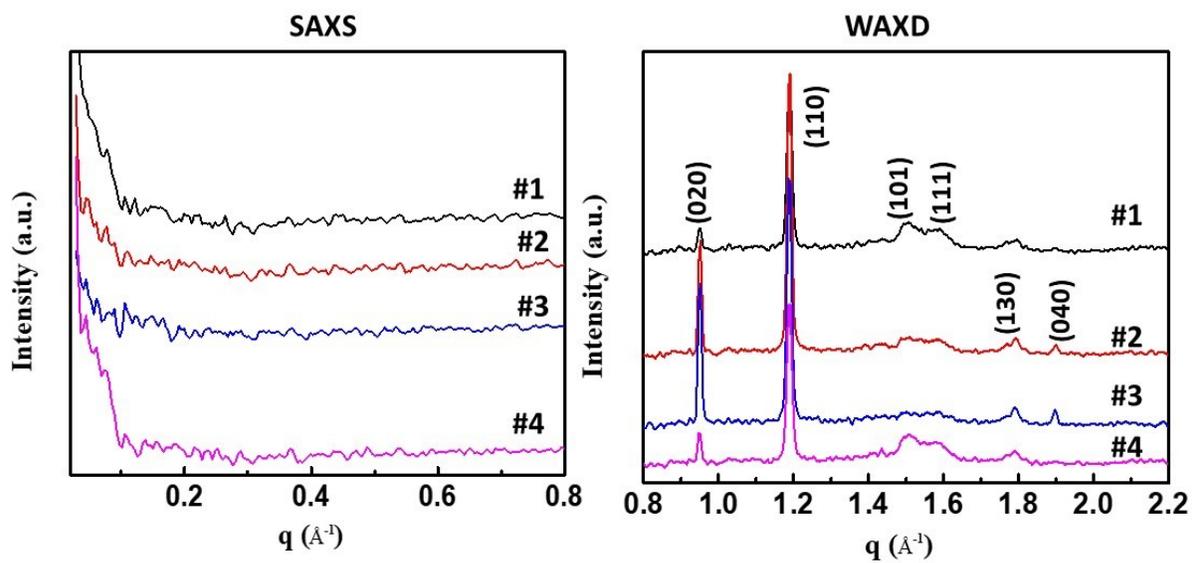


Figure S4: 1D X-ray diffraction plot on the PHB/PVAc/PMA banded spherulite.

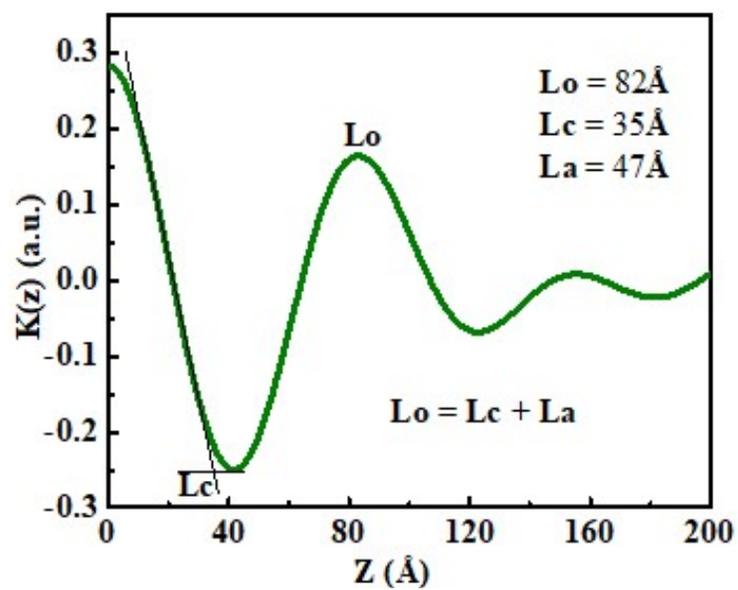


Figure S5: 1D correlation function of SAXS signal at spot #1 on the PHB/PVAc /PMA banded spherulite.

Table S1. Glass transition temperature (T_g) from DSC results of PHB/PVAc/PMA blends of different compositions.

| Ratio | 90/5/5 | 80/10/10 | 70/15/15 | 60/20/20 |
|------------------------------|---------------|-----------------|-----------------|-----------------|
| T_g (°C) | 1.69 | 2.4 | 3.71 | 5.23 |