

Improving the Processability and Performance of Micronized Fiber-Reinforced Green Composites through the Use of Biobased Additives

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Fourier Transform Infrared-Attenuated Total Reflection

Fourier Transform Infrared-Attenuated Total Reflection (FTIR-ATR) spectra were obtained on a Perkin-Elmer FT-IR System Spectrum BX spectrophotometer (Perkin-Elmer Inc., Waltham, MA, USA) equipped with a single horizontal Golden Gate ATR cell, over the range of 600–4000 cm^{−1} at a resolution of 4 cm^{−1} over 32 scans.

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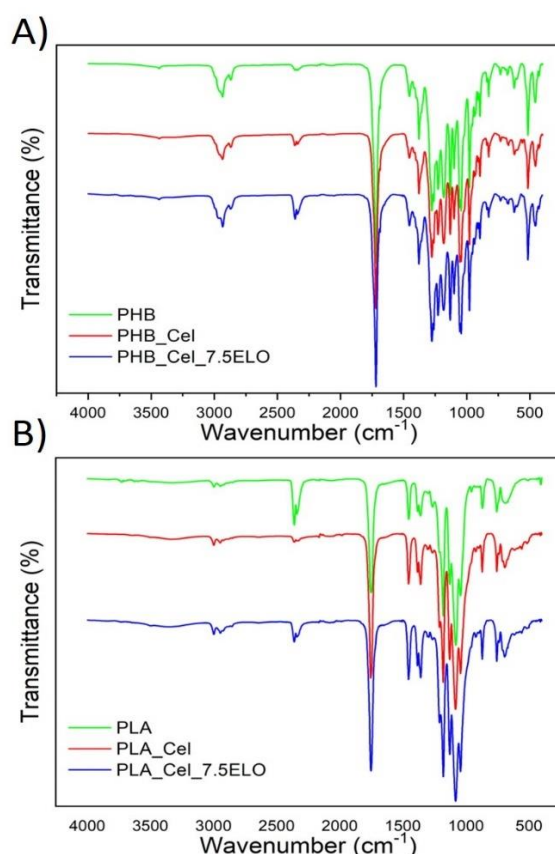


Figure S1. FTIR-ATR spectra of PHB, PHB_Cel and PHB_Cel 7.5 wt.% ELO (A) and PLA, PLA_Cel and PLA_Cel 7.5 wt.% ELO (B).

Differential Scanning Calorimetry

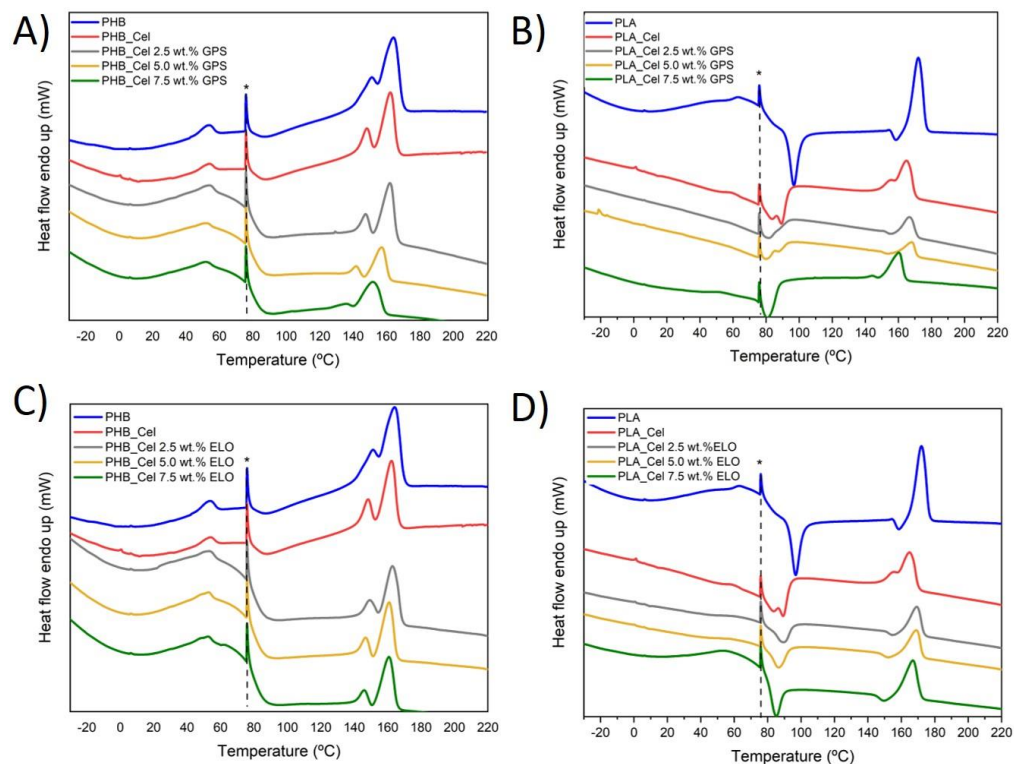


Figure S2. Differential scanning calorimetry curves of PHB- (A,C) and PLA-based composites (B,D) without and with different loads of GPS and ELO additives. * The peaks at 76 °C present in all samples are due to an equipment artefact.

Thermogravimetric Analysis

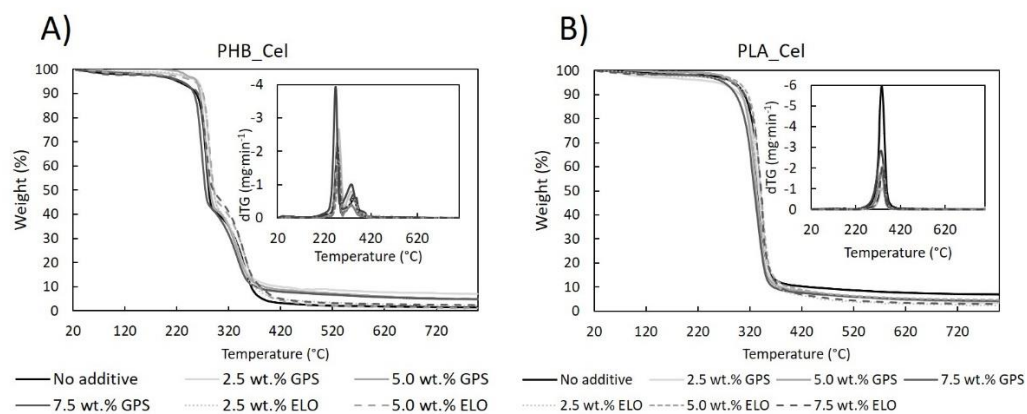


Figure S3. Thermogravimetric and derivative curves of PHB- (A) PLA-based composites (B) without and with different loads of GPS and ELO additives.