

# Supplementary Material

## Preparation, Thermal and Mechanical Characterization of UV-Cured Polymer Biocomposites with Lignin

Marta Goliszek <sup>1,2,\*</sup>, Beata Podkościelna <sup>1</sup>, Tomasz Klepka <sup>3</sup>, Olena Sevastyanova <sup>4,5</sup>

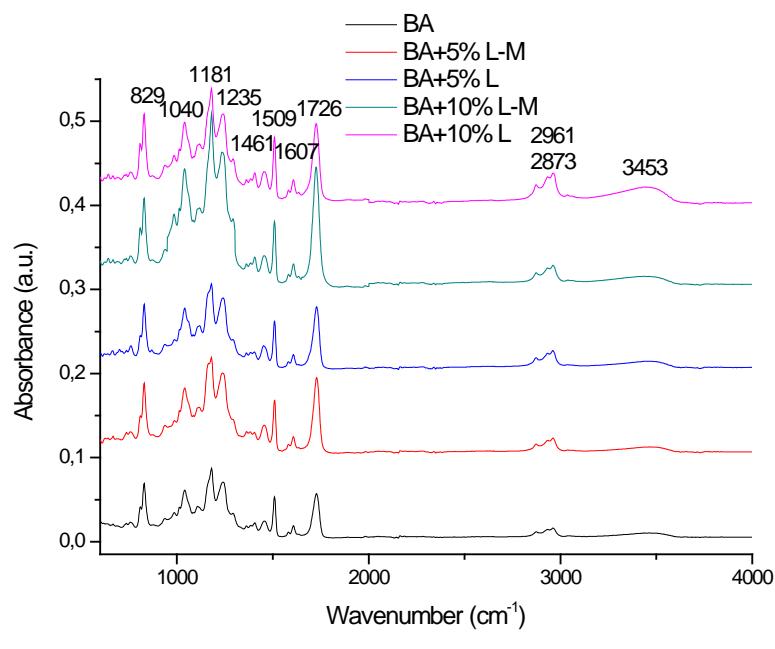
<sup>1</sup> Department of Polymer Chemistry, Institute of Chemical Science, Faculty of Chemistry, Maria Curie-Sklodowska University, M. Curie-Sklodowska Sq. 5, 20-031 Lublin, Poland; beatapod@poczta.umcs.lublin.pl

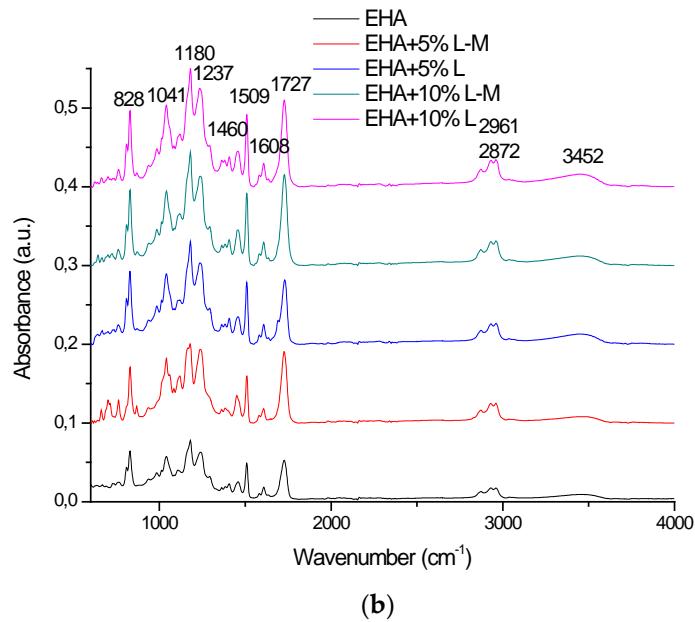
<sup>2</sup> Analytical Laboratory, Institute of Chemical Science, Faculty of Chemistry, Maria Curie-Sklodowska University, M. Curie-Sklodowska Sq. 5, 20-031 Lublin, Poland

<sup>3</sup> Department of Technology and Polymer Processing, Faculty of Mechanical Engineering, Lublin University of Technology, Nadbystrzycka 36, 20-618 Lublin, Poland; t.klepka@pollub.pl

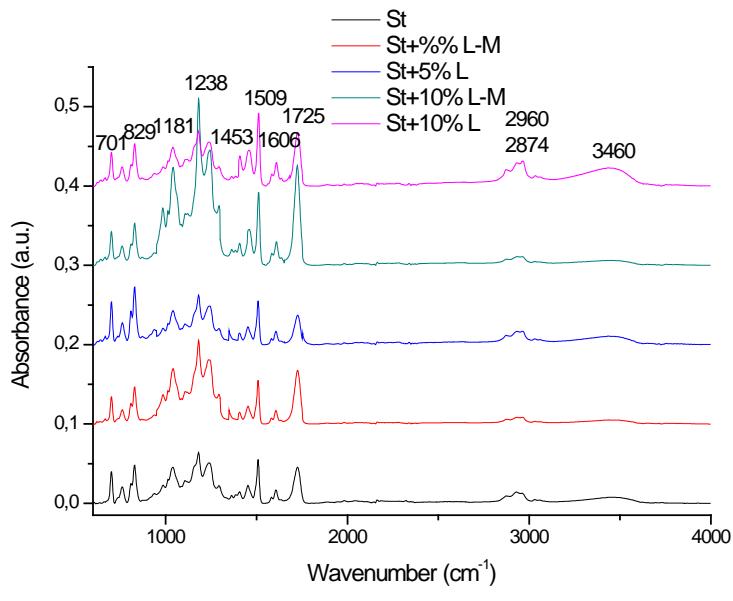
<sup>4</sup> Department of Fibre and Polymer Technology, KTH Royal Institute of Technology, Teknikringen 56-58, SE-10044, Stockholm, Sweden; olena@kth.se

<sup>5</sup> Wallenberg Wood Science Center (WWSC), Department of Fibre and Polymer Technology, KTH Royal Institute of Technology, Teknikringen 56-58, SE-10044, Stockholm, Sweden



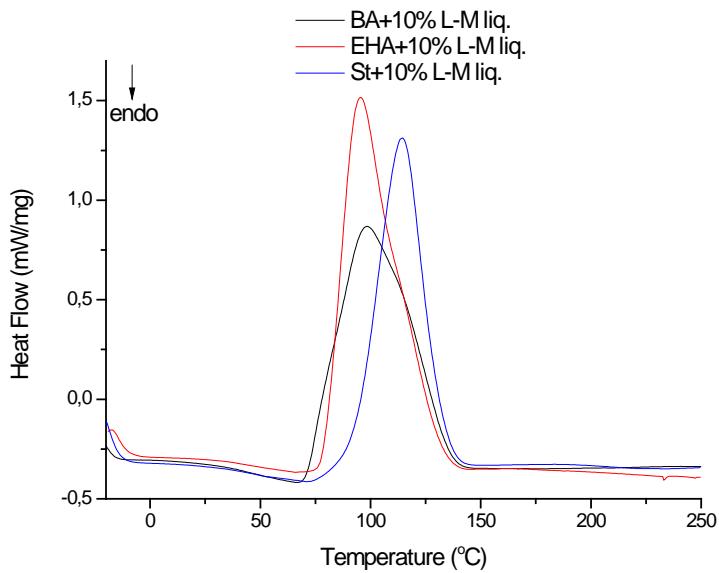


(b)

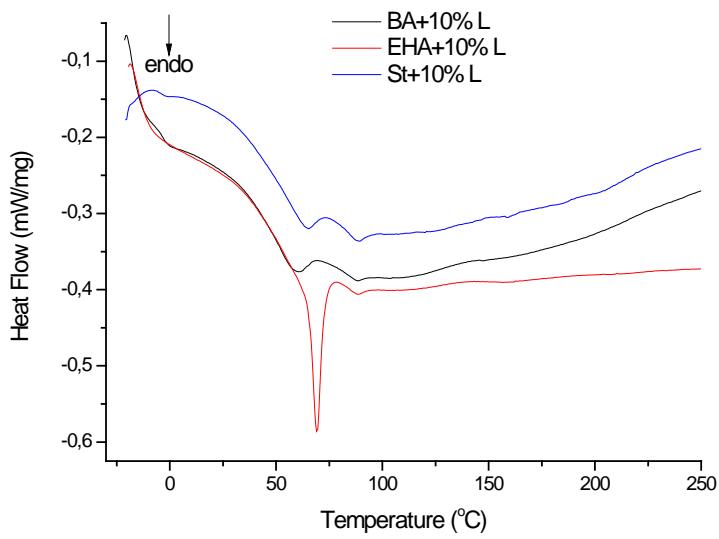


(c)

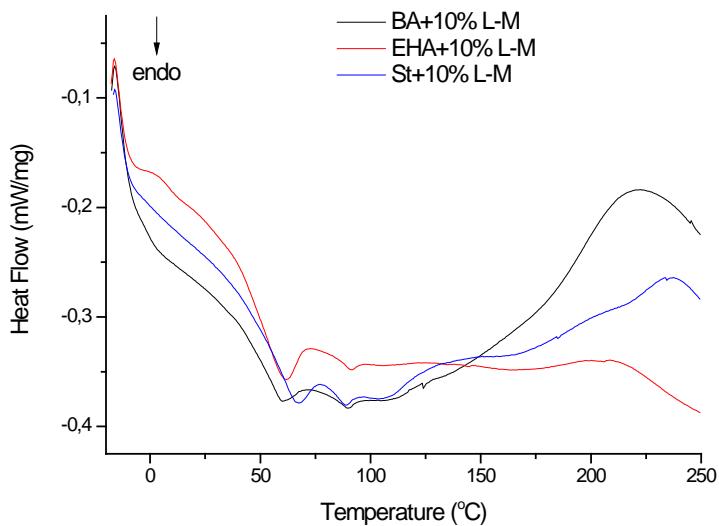
**Figure S1.** ATR/FT-IR spectra of: (a) biocomposites with BA, (b) biocomposites with EHA, (c) biocomposites with St.



(a)

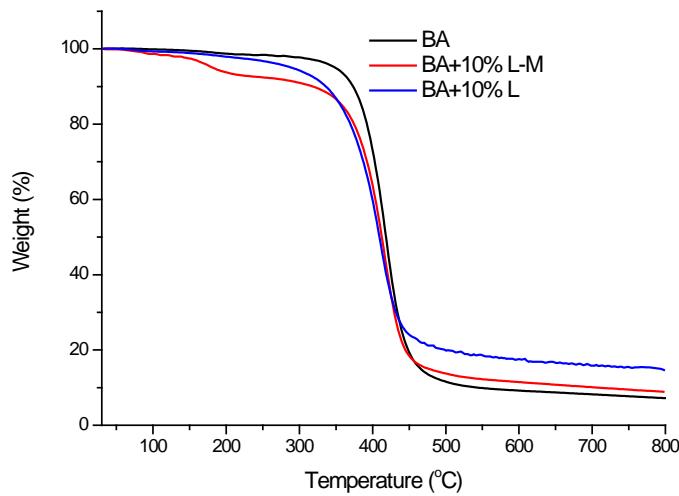


(b)

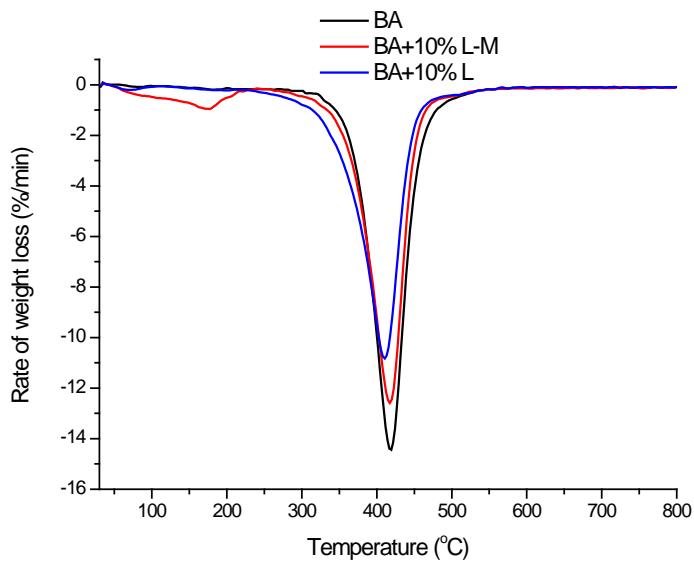


(c)

**Figure S2.** DSC curves of: (a) BA/EHA/St and 10% L-M before polymerization (polymerization takes place during the analysis), (b) BA/EHA/St biocomposites with 10% L, (c) BA/EHA/St biocomposites with 10% L-M.

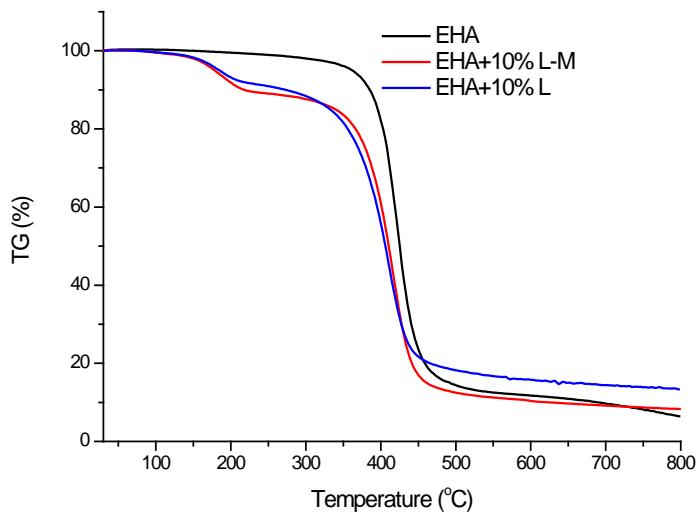


(a)

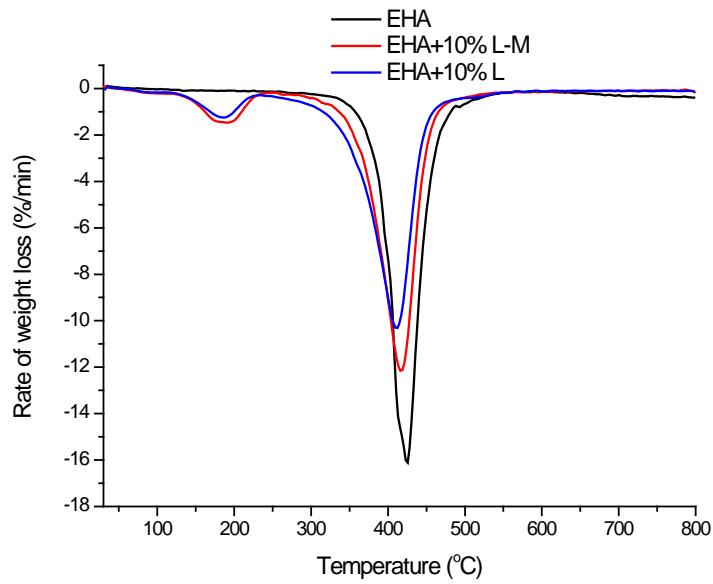


(b)

**Figure S3.** (a) TG and (b) DTG curves of BA, BA + 10% L-M and BA + 10% L composites.

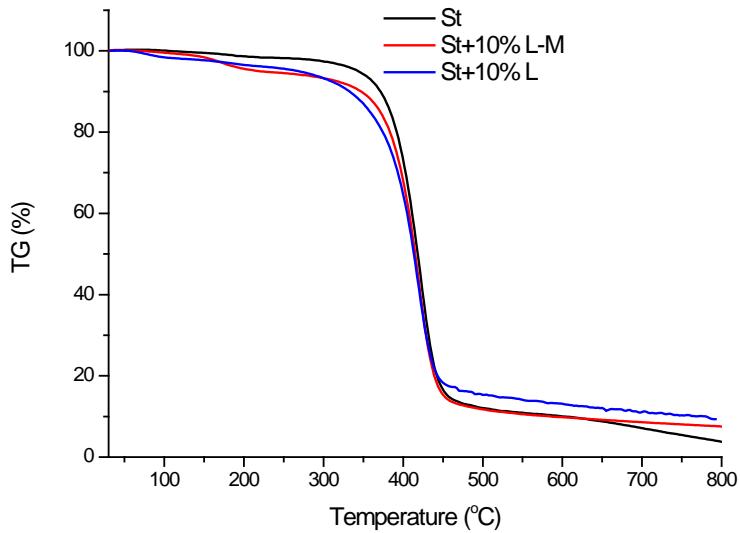


(a)

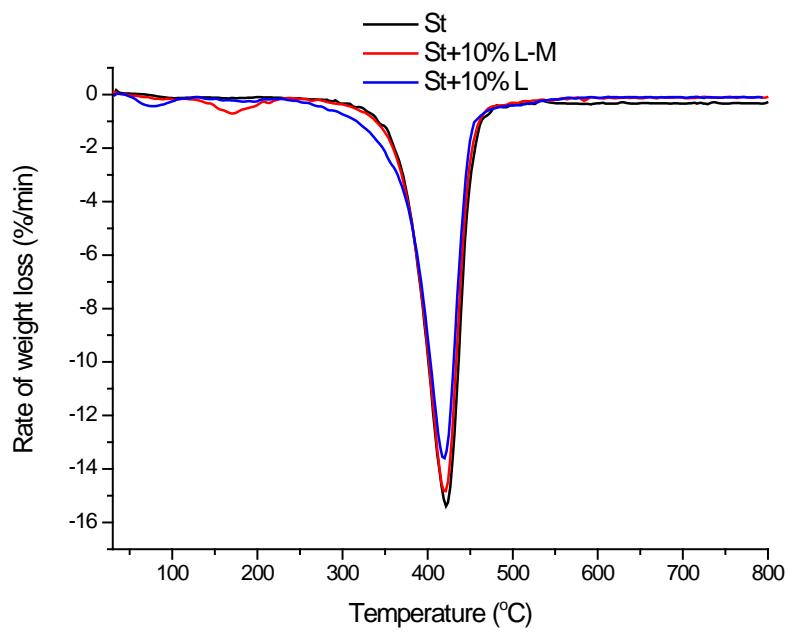


(b)

**Figure S4.** (a) TG and (b) DTG curves of EHA, EHA + 10% L-M and EHA + 10% L composites.



(a)



(b)

**Figure S5.** (a) TG and (b) DTG curves of St, St + 10% L-M and St + 10% L composites.