

**Electronic Supplementary Information for the paper entitled**

**Electrochemical decompatibilisation leads to morphology rearrangements in host-guest polymer blend films**

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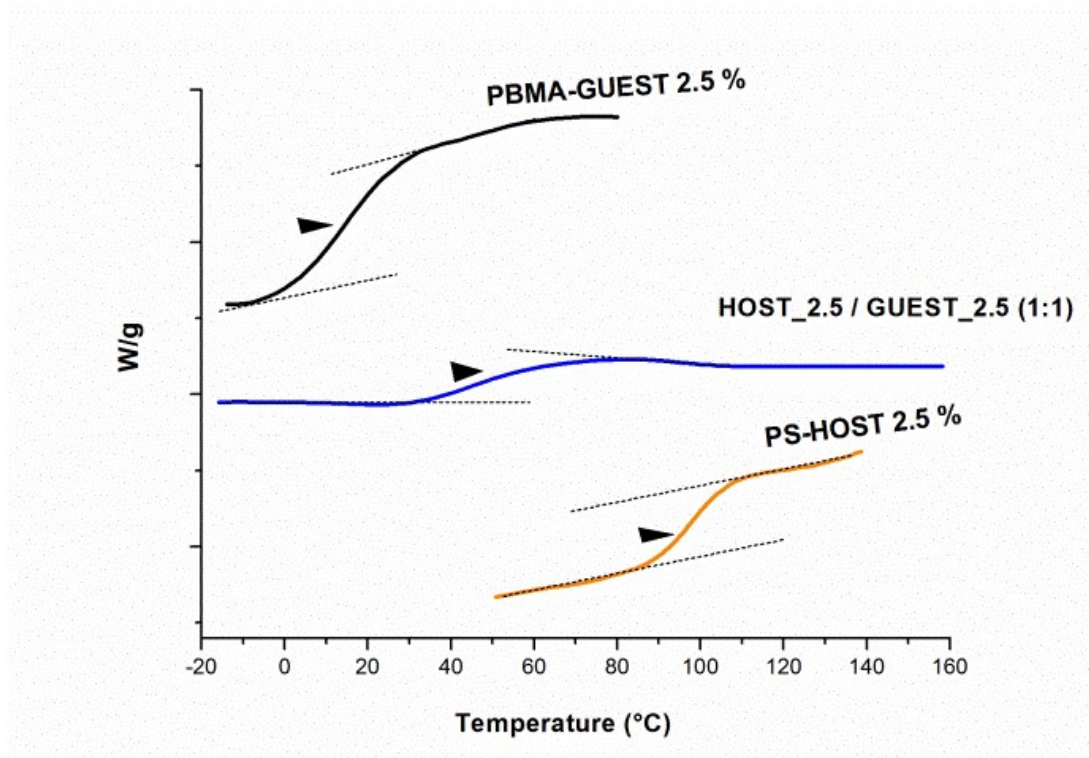
**DSC analyses.**

For PS and PS-HOST, the samples were heated from 30°C to 150°C (10°C/min as rate), followed by cooling from 150°C to 30°C (rate of 20°C/min), isotherm at 30°C for 3 minutes and another heating until 150°C. For PBMA and PBMA-GUEST, instead, the heating steps are from -30°C to 150°C (10°C/min), cooling from 150°C to -30°C with rate of 20°C/min and isotherm at -30°C for 3 minutes.

In the following table the 2.5% polymers data are compared to the 4% of reference 16:

<b>Component (Composition Molar Ratio)</b>	<b>T<sub>g</sub> (°C)</b>
PS	95
PS-HOST-4%	97
PS-HOST-2.5%	97
<i>PBMA</i>	26
PBMA-GUEST-4%	23
PBMA-GUEST-2.5%	20
PS / PBMA (1:1)	25/97
PS-HOST-4/ PBMA-GUEST-4% (1:1)	40
PS-HOST-2.5 / PBMA-GUEST-2.5% (1:1)	56

**Table S1.** Polymers and their blends analyzed by differential scanning calorimetry (DSC).



**Figure S1.** 2<sup>nd</sup> heating of DSC thermograms of PBMA-GUEST 2.5% (black line), PS-HOST 2.5% (red line) and their blend (1:1) (blue line).

The 8% HOST/GUEST containing copolymers have comparable T<sub>g</sub> to the 2.5% and 4% ones.