



## Supplementary Material

# Biomaterials Based on Carbon Nanotube Nanocomposites of Poly(styrene-*b*-isobutylene-*b*-styrene): The Effect of Nanotube Content on the Mechanical Properties, Biocompatibility and Hemocompatibility

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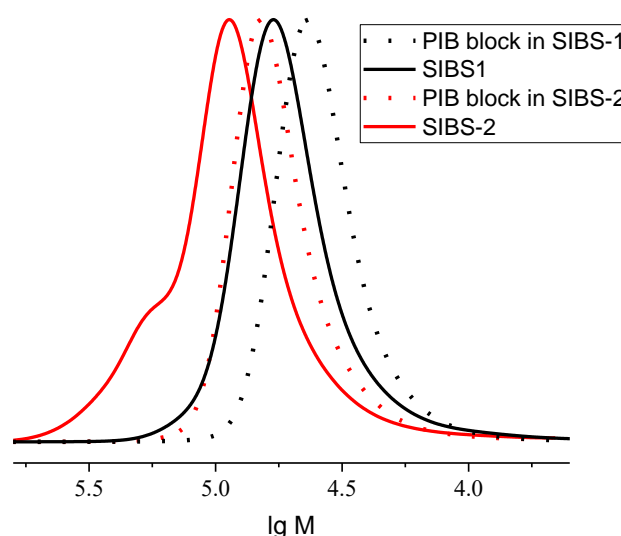
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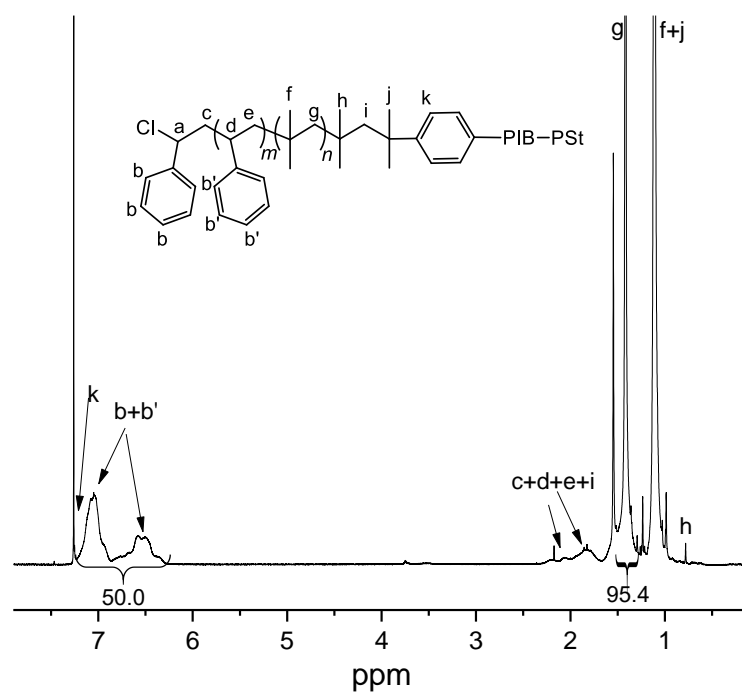
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**Figure S1.** SEC traces of polyisobutylenes and tri-block copolymers. See Table 1 for the details on the properties of SIBS-1 and SIBS-2.



**Figure S2.**  $^1\text{H}$  NMR spectra of the SIBS-2. Signal a was not detected due to high molecular weight of triblock copolymer sample.

$$\omega_{\text{St}} = \frac{I_{b+b'} \times 104/5}{I_{b+b'} \times 104/5 + I_g \times 56.1/2} \times 100\% \quad (\text{S1})$$

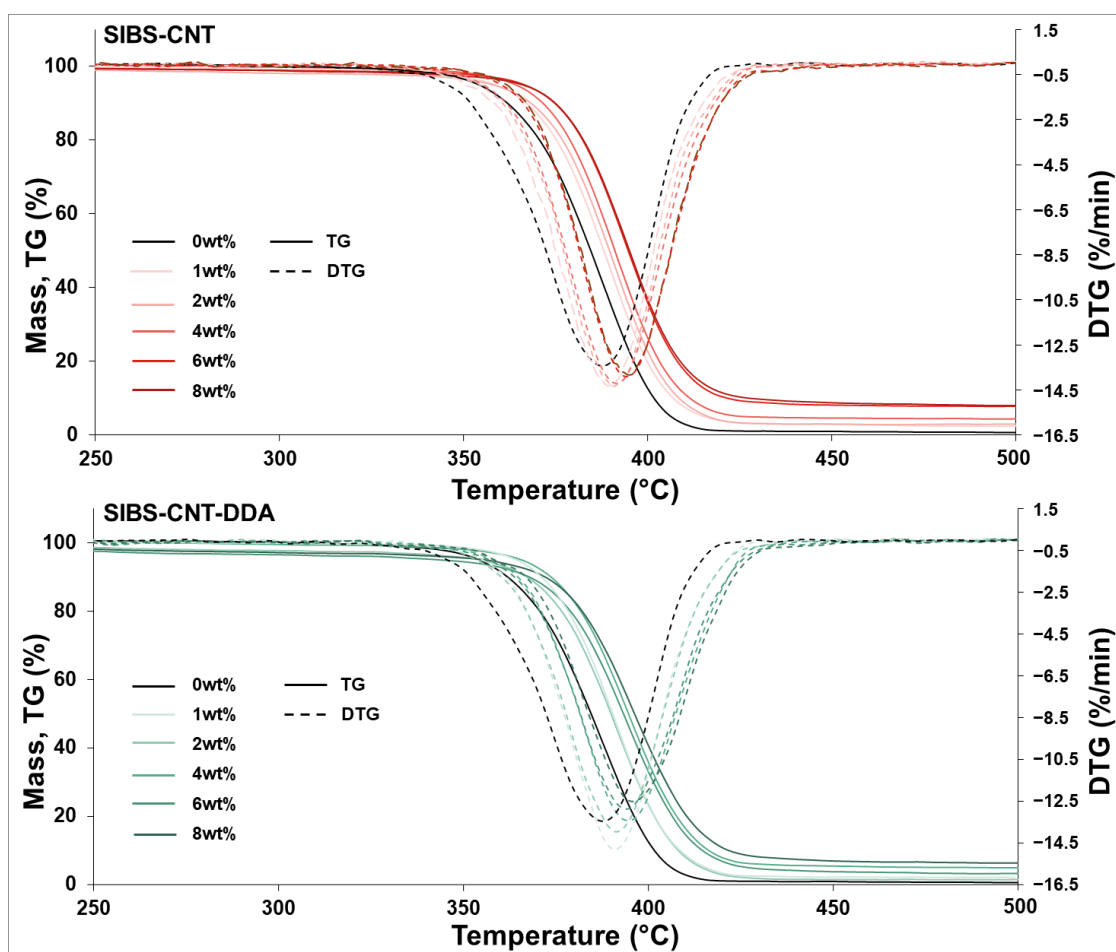


Figure S3. TG and DTG curves of nanocomposite films.

Table S1. The results of determining the particle size of CNT dispersions in chloroform by the DLS method.

Sample	Particle size, nm
CNT	$0.96 \pm 0.15$
	$11.70 \pm 1.02$
	$34.03 \pm 5.13$
	$141.3 \pm 29.48$
	$654.5 \pm 130.1$
CNT-COOH	$1.50 \pm 0.15$
	$11.70 \pm 2.03$
	$68.06 \pm 13.03$
	$342.0 \pm 71.91$
CNT-DDA	$1.29 \pm 0.19$
	$18.17 \pm 0.99$
	$55.48 \pm 8.90$
	$115.9 \pm 21.85$
	$499.4 \pm 93.73$

**Table S2.** Decomposition parameters of composite films and pure polymer.

Sample	T <sub>onset</sub> (°C)	T <sub>max</sub> (°C)	T <sub>end</sub> (°C)	Residual weight, %
SIBS	365.9	387.6	402.8	0.24
SIBS-CNT-1%	370.8	389.6	404.7	1.77
SIBS-CNT-2%	372.9	389.7	406.2	2.14
SIBS-CNT-4%	374.1	391.2	406.6	3.39
SIBS-CNT-6%	377.2	394.5	409.8	7.06
SIBS-CNT-8%	377.5	395.2	410.0	7.22
SIBS-CNT-DDA-1%	373.6	390.9	406.2	2.23
SIBS-CNT-DDA-2%	373.1	391.2	407.7	1.50
SIBS-CNT-DDA-4%	376.7	395.0	410.8	3.84
SIBS-CNT-DDA-6%	375.8	393.9	410.9	3.34
SIBS-CNT-DDA-8%	377.7	395.7	413.3	6.35