

Supplementary Material

Polarized Emission of Wholly Aromatic Bio-Based Copolyesters of a Liquid Crystalline Nature

Kai Kan, Daisaku Kaneko and Tatsuo Kaneko *

School of Materials Science, Japan Advanced Institute of Science and Technology, 1-1, Asahidai, Nomi, Ishikawa, 923-1292, Japan; E-Mails: kaikan@jaist.ac.jp (K.K.); daisaku@jaist.ac.jp (D.K.)

* Author to whom correspondence should be addressed; E-Mail: kaneko@jaist.ac.jp; Tel.: +81-761-51-1631; Fax: +81-761-51-1635.

Table S1. Monomer composition and molecular weight of Poly(3,4-BAHBA-co-4HCA)s.

3,4-BAHBA/4HCA (mol%)	M_n	M_w	M_w/M_n
100/0	2,100	2,300	1.1
75/25	2,300	2,500	1.1
50/50	2,500	2,600	1.1

Table S2. Thermal analysis data of Poly(3,4-BAHBA-co-4HCA)s.

3,4-BAHBA/4HCA (mol%)	T_g^a (°C)	T_m^a (°C)	T_m^b (°C)	T_{rc}^b (°C)	T_{10}^c (°C)
100/0	135	N ^d	184	-	300
75/25	130	N ^d	212	-	315
50/50	125	220	217	-	315
25/75	N ^d	215	204	298	345
0/100	N ^d	220	215	280	350

^a T_g and T_m were measured by DSC upon a second heating under nitrogen (10 °C/min). ^b T_m and T_{rc} were measured by polarizing microscope (10 °C/min). ^c T_{10} were measured by TGA under nitrogen (10 °C/min). ^d N = transition did not occur. T_g : glass transition temperature, T_m : melting temperature, T_{rc} : recrystallization temperature, T_{10} : 10% weight-loss temperature.

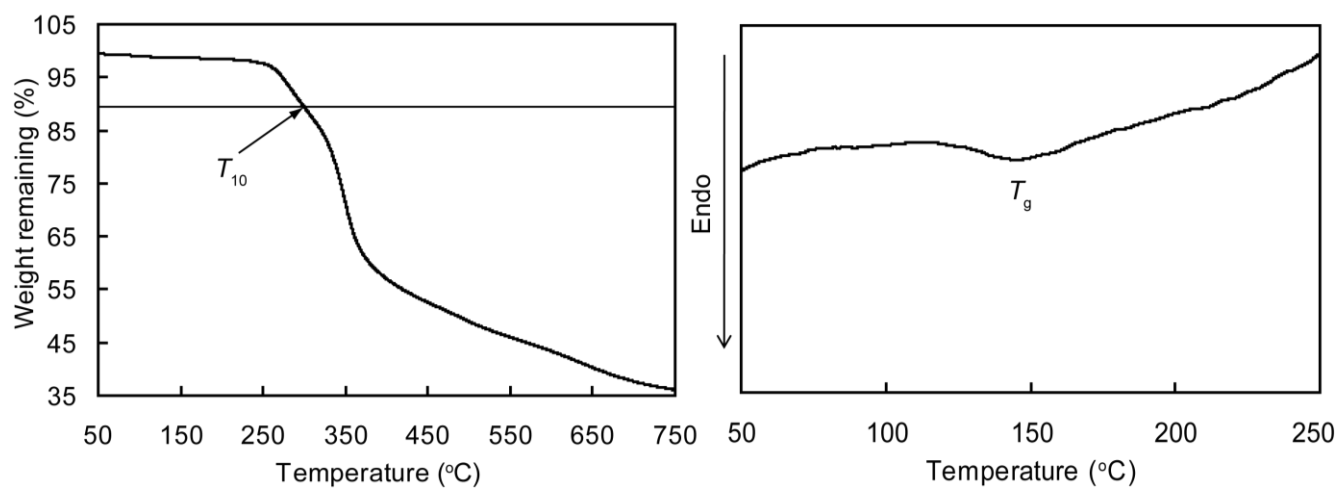
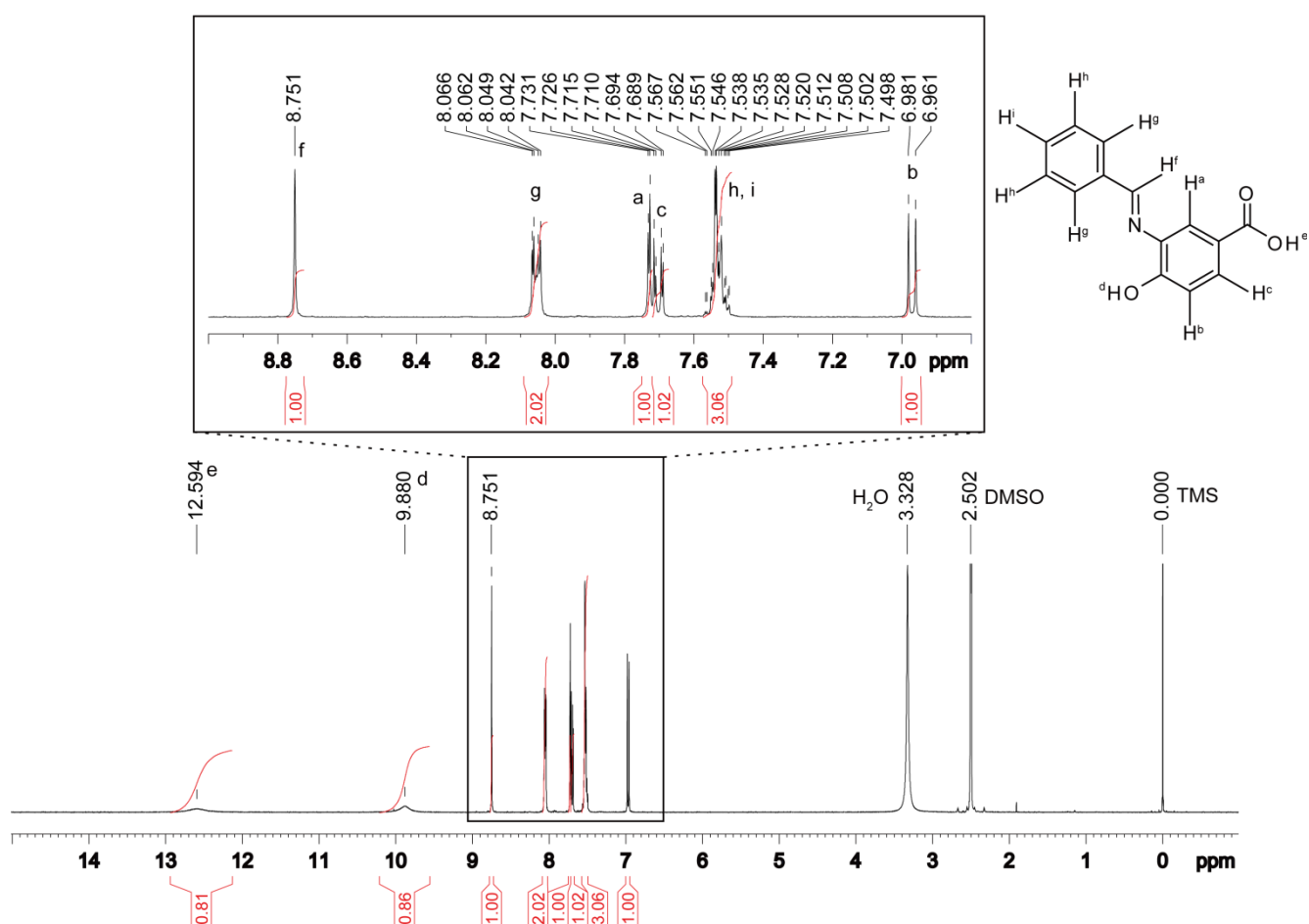
Figure S1. TGA and DSA thermogram of Poly(3,4-BAHBA).**Figure S2.** ^1H -NMR spectra of 3,4-BAHBA.

Figure S3. ^{13}C -NMR spectra of 3,4-BAHBA.