Crystallization Kinetics and Morphology of Novel Miscible Crystalline/Amorphous Polymer Blends of Biodegradable Poly(butylene succinate-co-butylene carbonate) and Poly(vinyl phenol)

Mengting Weng and Zhaobin Qiu*

State Key Laboratory of Chemical Resource Engineering, Key Laboratory of Carbon Fiber and Functional Polymers, Ministry of Education, Beijing University of Chemical Technology, Beijing 100029, China

Fax: +86-10-64413161. E-mail: qiuzb@mail.buct.edu.cn.
Figure S1 shows the enlarged DSC traces showing the glass transition regions of neat PBSC, neat PVPh, and their blends.
Figure S2 illustrates the POM images showing the spherulitic morphology of (a) 100/0, (b) 80/20, and (c) 60/40 crystallized at the same supercooling of 45 °C. It is clear from Figure S2 that the nucleation density increases with an increase in the PVPh composition in the blends, relative to neat PBSC.
Figure S3 shows the SAXS profiles for neat PBSC and its blends, from which the peak shifts to lower 2θ range with an increase in the PVPh content, indicating that the long period values become gradually larger.