

Electronic supplementary information (ESI)

Based on the host-guest chemistry to build smart Janus-like supramolecular polymer and Its Self-Assembly

Long Yang, Yinzhou Guo, Zhongli Lei *

Key Laboratory of Applied Surface and Colloid Chemistry, Ministry of Education, Shaanxi Normal University,
Xi'an, 710062, China E-mail address: zhlllei2013@163.com Tel: +86 029 81530812; fax: +86 29 85307774

TABLE S1. GPC Characterization Result of Prepared polymer Chains

Sample	Mn	PDI
β -CD-(NIPAAm) ₄	5623	1.27
Ad-PtBMA	6825	1.19
alkyne-(PtBMA-Br) ₂	13953	1.23
Ad-(PtBMA) ₃	20578	1.21
Ad-(PtBMA) ₇	48084	1.34

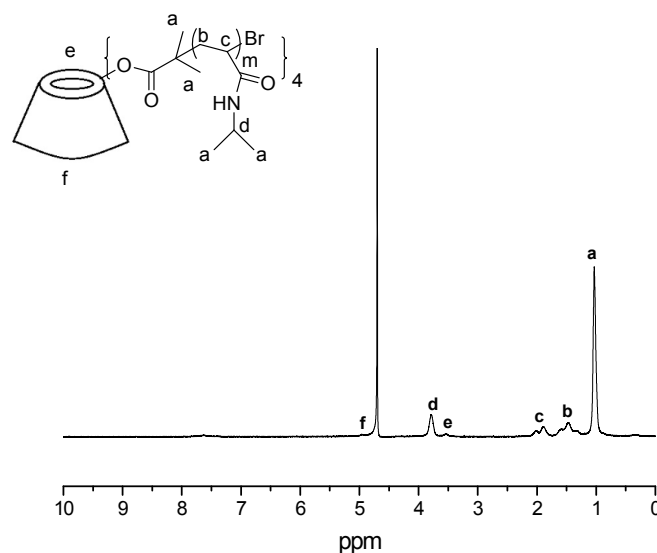


Figure S1 The ¹H NMR spectrum of β -CD-(PNIPAAm)₄(D₂O, 400 MHz, 25 °C)

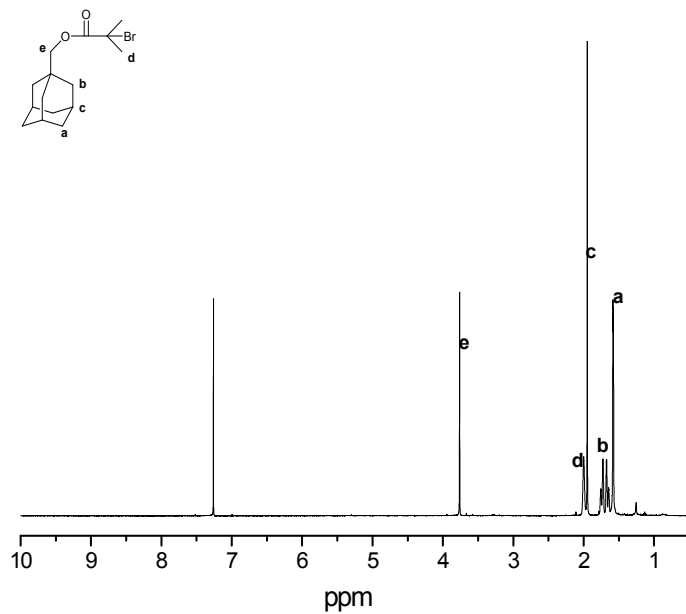


Figure S2 The ¹H NMR spectrum of Ad-Br (CD₃Cl, 400 MHz, 25 °C)

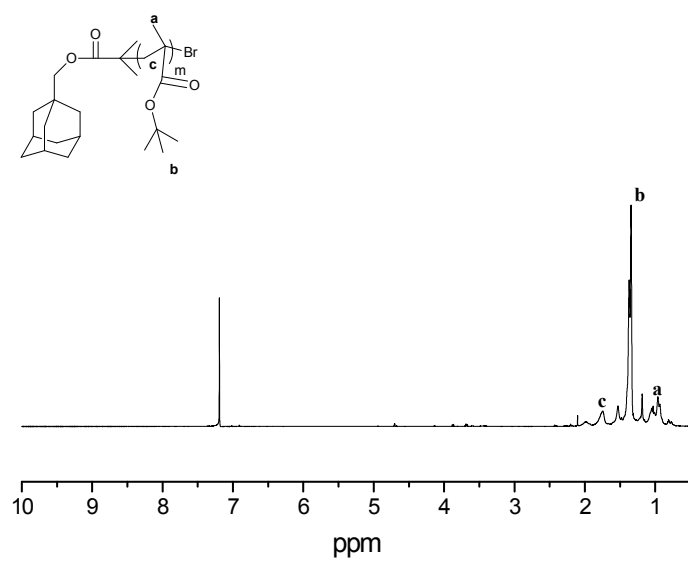


Figure S3 The ¹H NMR spectrum of Ad-PtBMA-Br (CD₃Cl, 400 MHz, 25 °C)

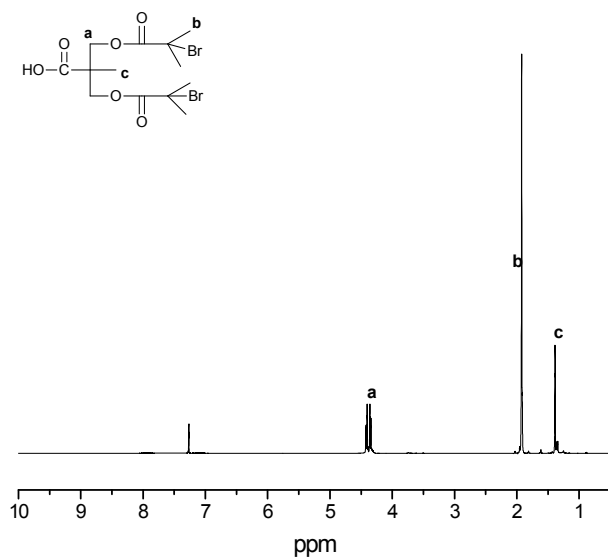


Figure S4 The ^1H NMR spectrum of product BPA (CD_3Cl , 400 MHz, 25 °C)

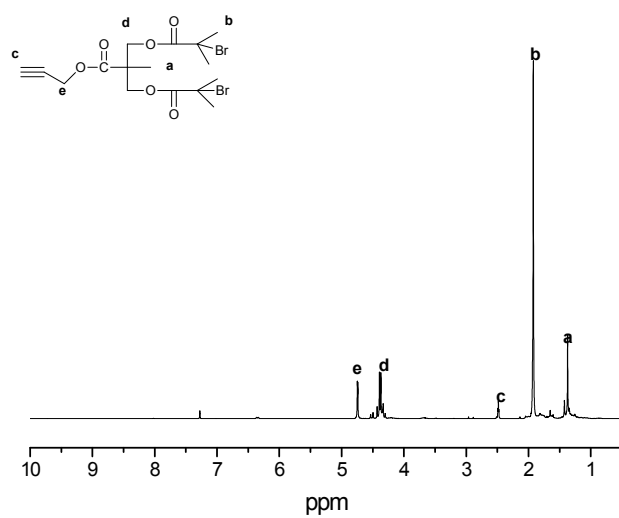


Figure S5 The ^1H NMR spectrum of PBMP (CD_3Cl , 400 MHz, 25 °C)

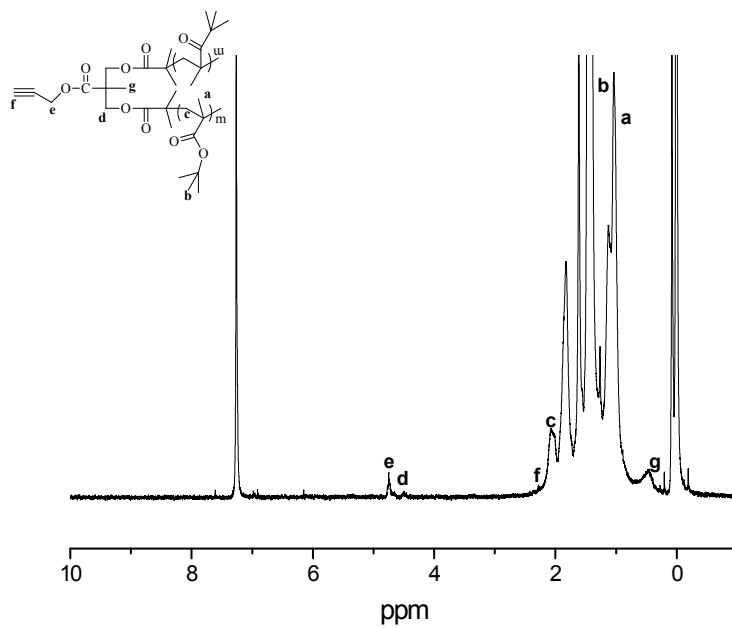


Figure S6 The ¹H NMR spectrum of alkyne-(PtBMA-Br)₂ (CD₃Cl, 400 MHz, 25 °C)

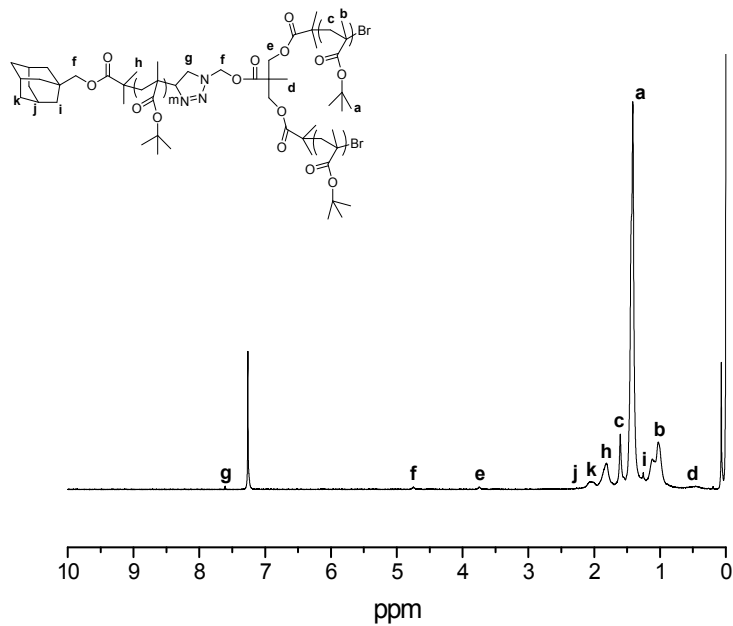


Figure S7 The ¹H NMR spectrum of Ad-(PtBMA)₃ (CD₃Cl, 400 MHz, 25 °C)

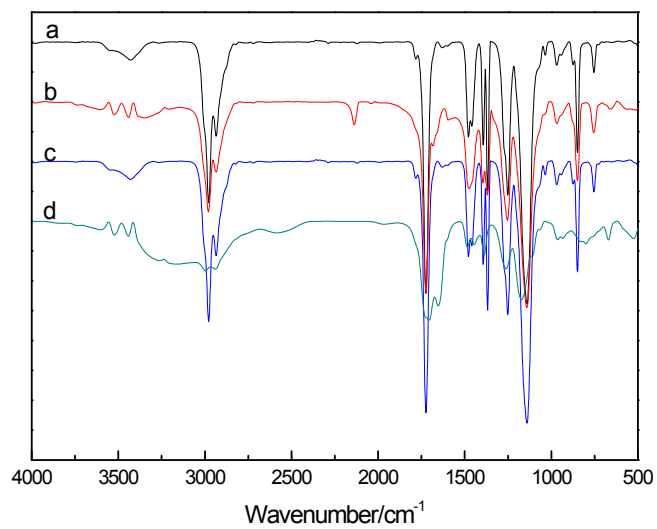


Figure S8 The IR spectrum of polymer

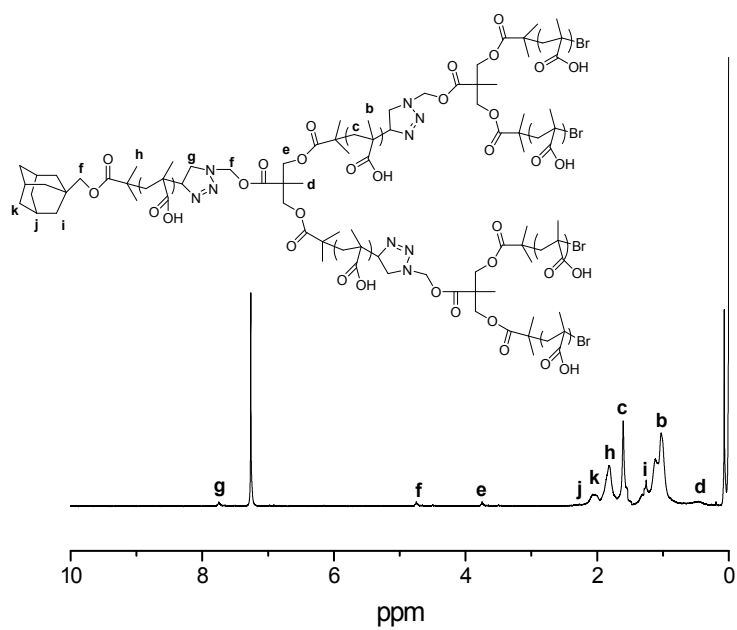


Figure S9 The ¹H NMR spectrum of product Ad-(PMAA)₇ (CD₃Cl, 400 MHz, 25 °C)