Supporting Information

Chiral Interpenetrating Polymer Network Constructed by Helical Substituted Polyacetylenes and Used for Glucose Adsorption

*Junya Liang and Jianping Deng**

State Key Laboratory of Chemical Resource Engineering, College of Materials Science and Engineering, Beijing University of Chemical Technology, Beijing 100029, China

E-mail: dengjp@mail.buct.edu.cn

Swelling ratio of polyHIPE in THF

To analyze the swelling ratio of the obtained polyHIPEs, a polyHIPE of known weight (m_0) was placed in a dialysis bag and immersed in THF at 0 ºC. When the adsorption reached equilibrium, the wet polyHIPE was taken out and drained for 1 min until no residual droplet was left on the surface. The weight was marked as m_{eq}. The swelling ratio was calculated by the following equation, swelling ratio = $(m_{eq}–m_0)/m_0$. The dried polyHIPE was subjected to the above process for 5 times.

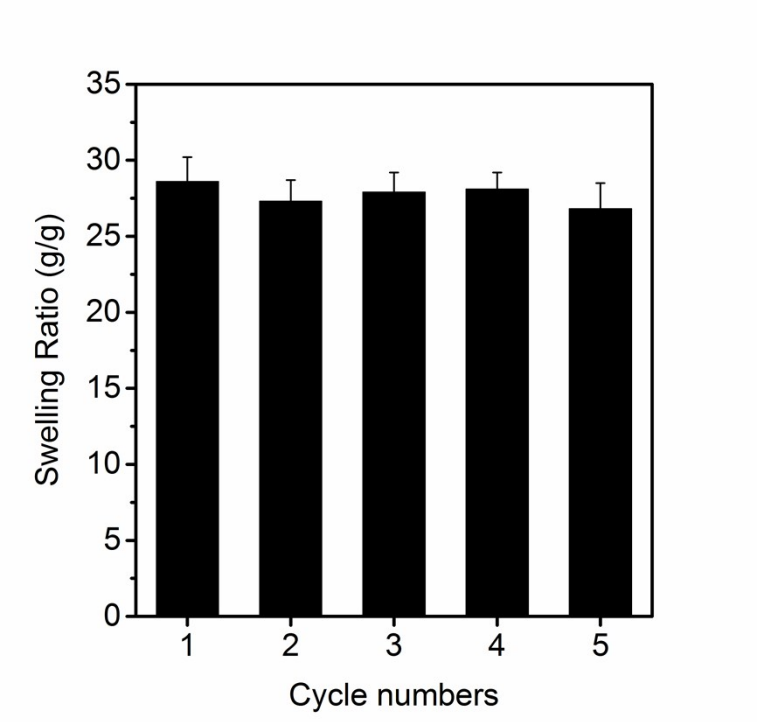

Figure S1. Swelling ratio of the polyHIPE in THF at 0 ºC for five times.

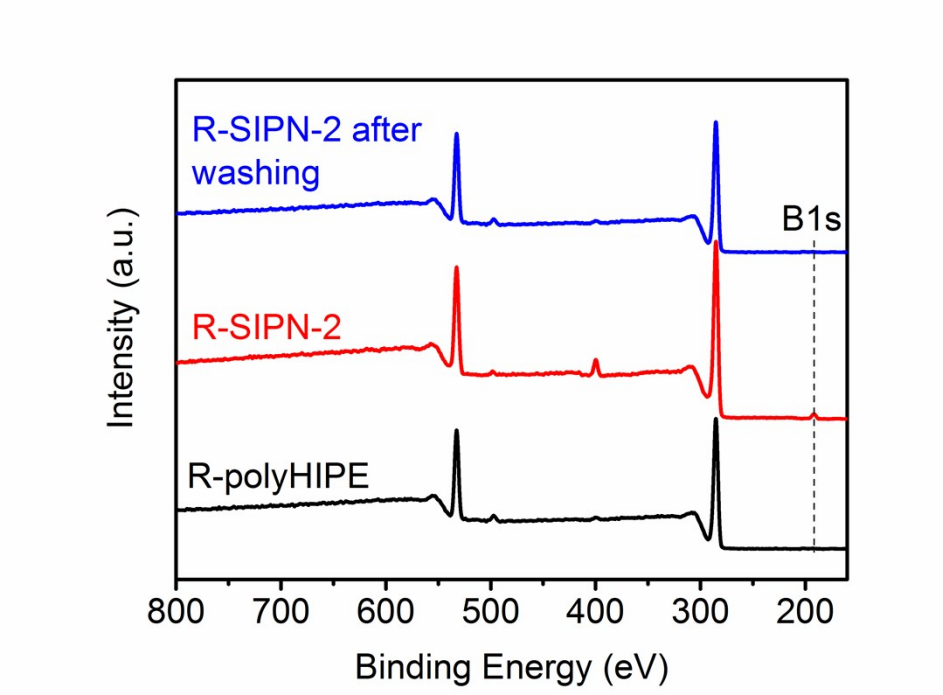

Figure S2. XPS spectra of R-polyHIPE, R-SIPN-2, and R-SIPN-2 after washing.

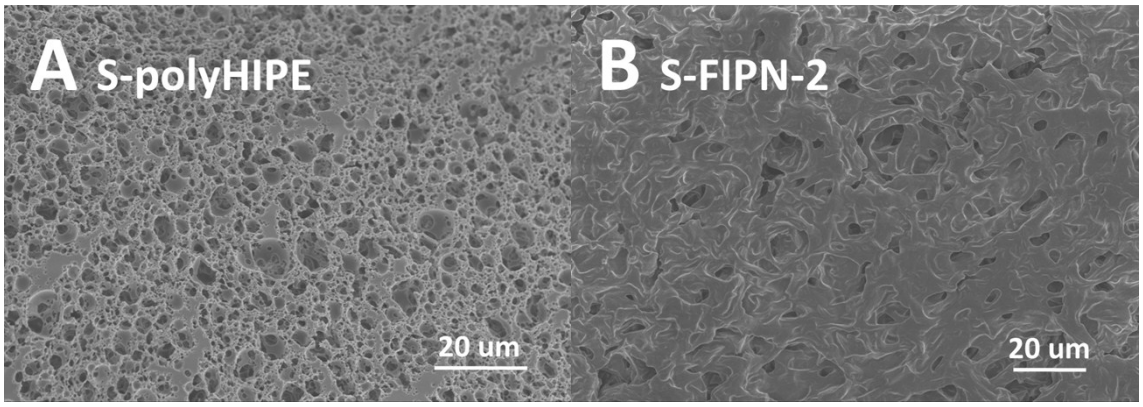

Figure S3. SEM images of (A) S-polyHIPE, and (B) S-FIPN-2.

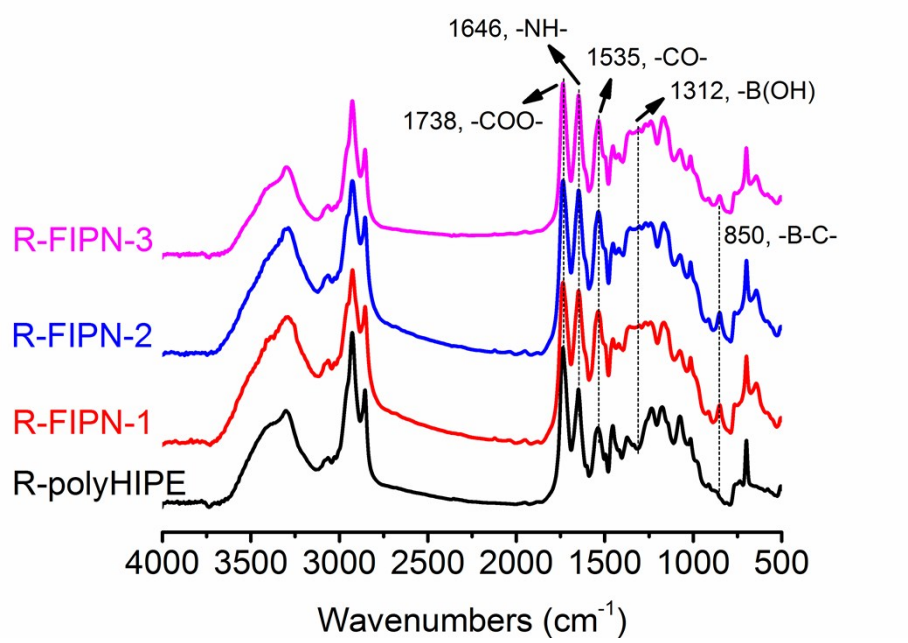

Figure S4. FT-IR spectra of R-polyHIPE, R-FIPN-1, R-FIPN-2, and R-FIPN-3 (in KBr Tablet).

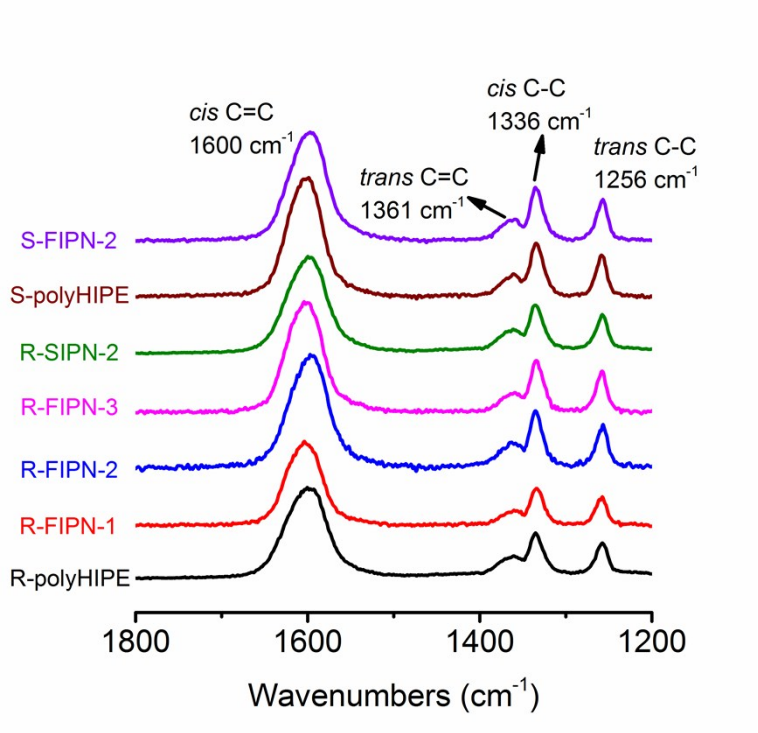

Figure S5. Raman spectra of polyHIPEs and IPNs (with an excitation wavelength of 785 nm).

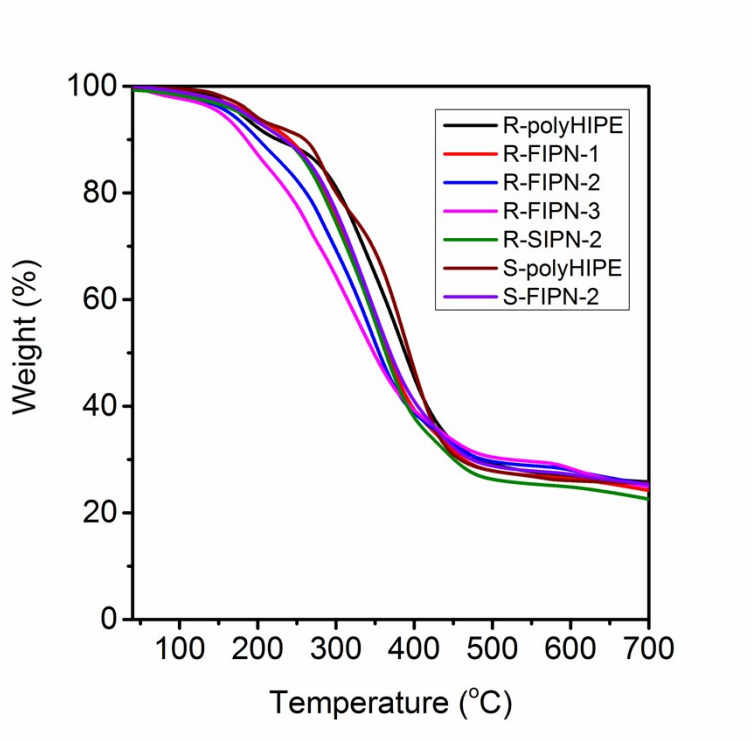

Figure S6. TGA curves of polyHIPEs and IPNs. Heating at 10 °C/min in nitrogen atmosphere.