Electronic Supplementary Information (ESI)

Effects of alkyl chain length, solvent and tandem Claisen rearrangement on two-dimensional structures of noncyclic isobutenyl compounds: Scanning tunneling microscopic study

Yoshihiro Kikkawa,*[, a] Kazuhiro Omori,[a, b] Mayuko Takahashi,[a]

Masatoshi Kanesato,[a] and Kazuhisa Hiratani*[, a]

[a] *National Institute of Advanced Industrial Science and Technology (AIST), 1-1-1 Higashi, Tsukuba, Ibaraki 305-8562, Japan*

[b] *Industrial Technology Center of Tochigi Prefecture, 950 Tenjin, Sano, Tochigi 327-0847, Japan*

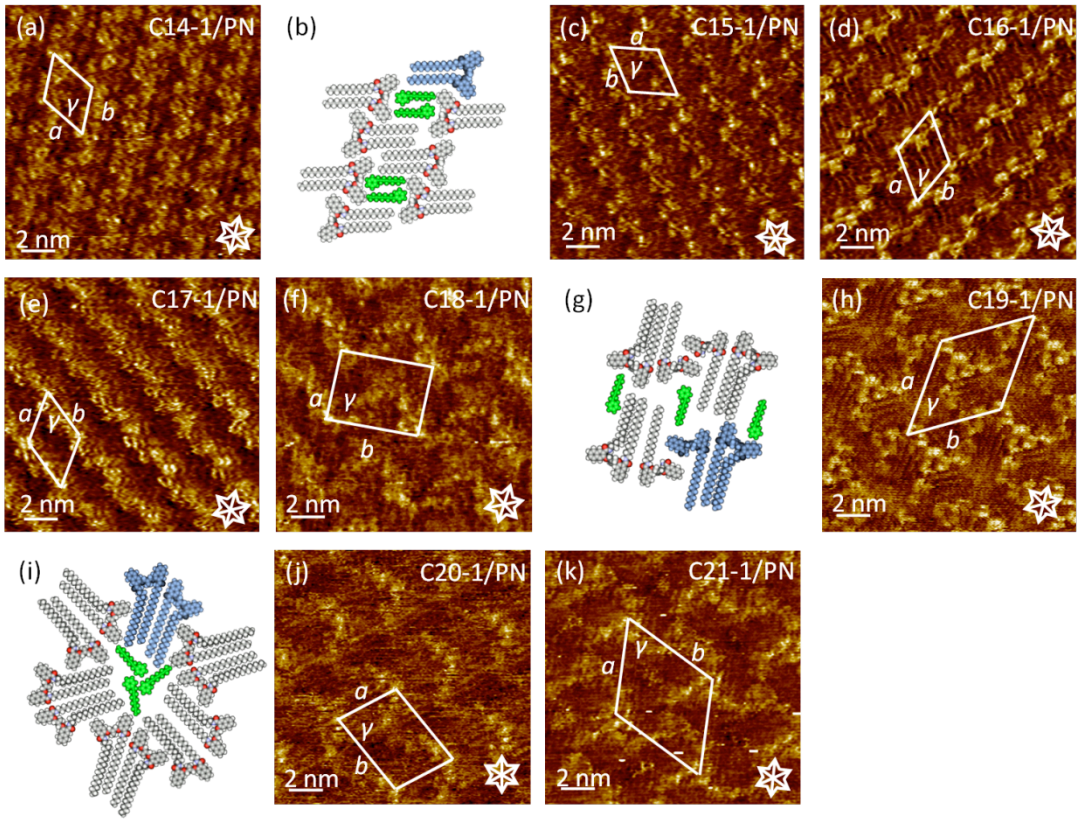

Figure S1 STM images of **Cn-1** (n = 14 – 21) physisorbed at the HOPG/PN interface and tentative molecular models based on the STM images. One of the building blocks of 2D structures and coadsorbed PN molecules are colored in blue and green, respectively. (a) **C14-1**, I = 3.0 pA, V = -917 mV; (b) Molecular model of **C14-1**; (c) **C15-1**, I = 8.7 pA, V = -613mV; (d) **C16-1**, I = 8.2 pA, V = -288 mV; (e) **C17-1**, I = 8.4 pA, V = -564 mV; (f) **C18-1**, I = 8.0 pA, V = -890 mV; (g) Molecular model of **C18-1**; (h) **C19-1**, I = 2.0 pA, V = -604 mV; (i) Molecular model of **C19-1**; (j) **C20-1**, I = 7.7 pA, V = -438 mV; (k) **C21-1**, I = 2.0 pA, V = -697 mV.

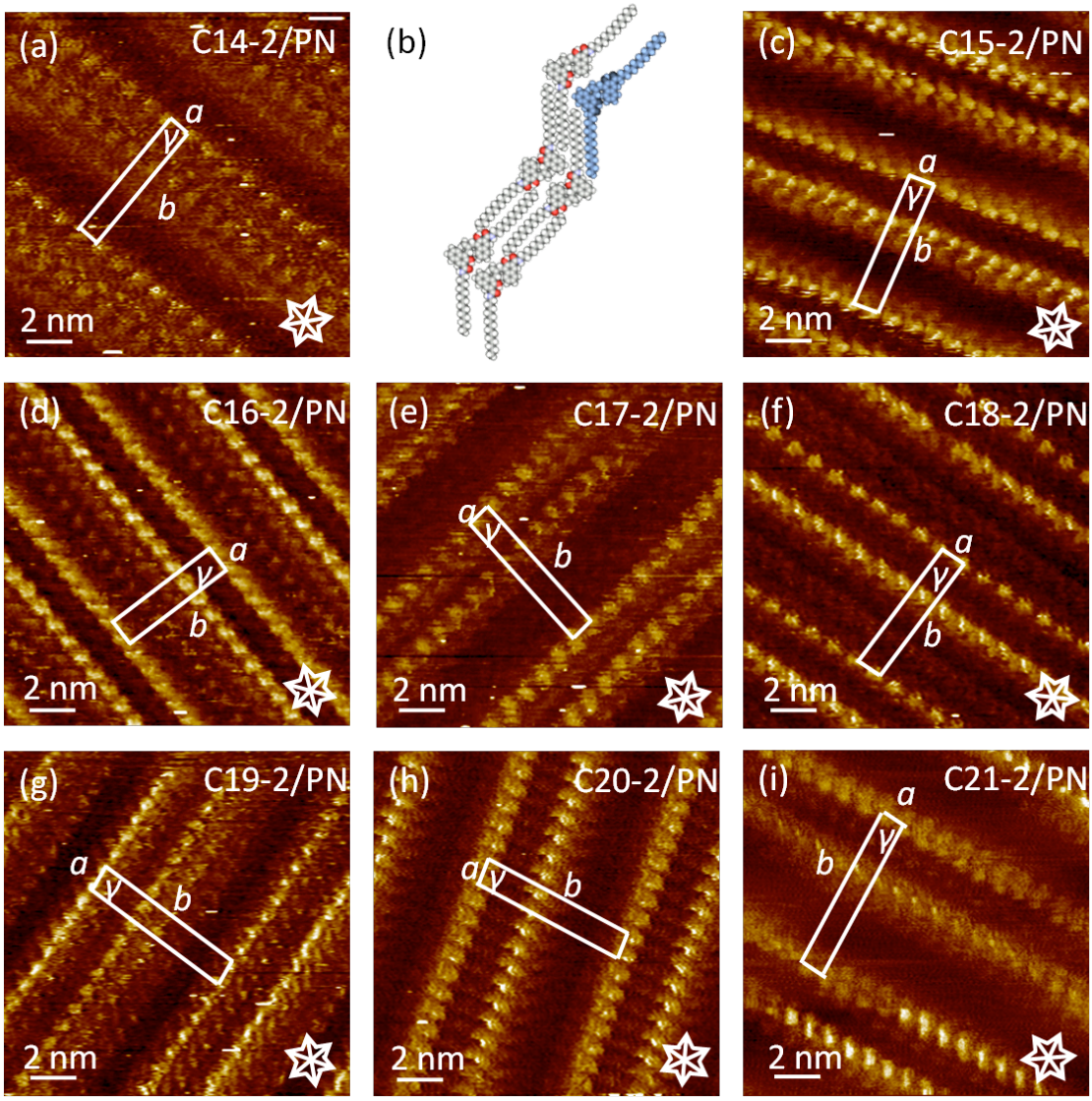

Figure S2 STM images of **Cn-2** (n = 14 – 21) physisorbed at the HOPG/PN interface and tentative molecular model based on the STM image. One of the molecular constituents is colored in blue. (a) **C14-2**, I = 1.3 pA, V = -947 mV; (b) Molecular model of **C14-2**; (c) **C15-2**, I = 1.3 pA, V = -900 mV; (d) **C16-2**, I = 2.0 pA, V = -1000 mV; (e) **C17-2**, I = 1.6 pA, V = -1000 mV; (f) **C18-2**, I = 1.8 pA, V = -1000 mV; (g) **C19-2**, I = 2.4 pA, V = -783 mV. (h) **C20-2**, I = 1.1 pA, V = -827 mV; (i) **C21-2**, I = 1.2 pA, V = 1100 mV.