SUPPORTING INFORMATION

Self-accommodating honeycomb networks from supramolecular selfassembly of *s*-indacene-tetrone on silver surfaces

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Figure S1: STM images of the self-accommodating honeycomb supramolecular phase HC1 formed by INDO₄ on Ag(100), and registered under three distinct tip imaging conditions. Visualization of the backbones of INDO₄ type A and type B adsorption configurations as (a) oval-shaped features of same brightness, (b) bright and dim protrusions, respectively, and (c) in reverse way. Scale bars: (a-c) 3 nm. Tunneling parameters: (a) 280 pA, -1450 mV; (b) 250 pA, -1930mV; (c) 250 pA, -1100 mV.



Figure S2: Subsequent STM images of the same region of the honeycomb pattern HC2 formed by INDO₄ on Ag(111) surface. (a,b) Initial and final positions of the mobile molecular species indicated by yellow and white contours in STM images that were acquired with a time separation of 3 min. (c) Overlay of the two images modified into red and green color scale, respectively, such that stationary STM features appear approximately yellow and mobile species in green or red. Scale bars: (a-c) 4 nm. Tunneling parameters: (a-c) 220 pA, -1450 mV.



Figure S3: STM images of the self-accommodating honeycomb supramolecular phase HC3 formed by INDO₄ on Ag(110), and registered under three distinct tip imaging conditions. Visualization of the backbones of INDO₄ type A and type B adsorption configurations as (a) oval-shaped features of similar brightness, (b) bright and dim protrusions, respectively, and (c) in reverse way. Scale bars: (a-c) 3 nm. Tunneling parameters: (a) 250 pA, 770 mV; (b) 250 pA, 1400 mV; (c) 220 pA, -1400 mV.



Figure S4: Large scale STM images (100×100 nm²) of the phases (a) HC1 on Ag(100), (b) HC2 on Ag(111) and (c) HC3 on Ag(110).