Supporting Information

Dynamic Conjugated Microporous Polymers: Visible Light-Harvesting via Guest Responsive Reversible Swelling

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Supporting figures:

Figure S1. Energy minimized geometry of tetra biphenyl pyrene.
Figure S2. Solid-state $^{13}$C-CP-TOSS NMR spectrum of Py-BPP.

Figure S3. Solid-state FT-IR spectra of BDPE, TBP and Py-BPP measured in KBr.
Figure S4. TGA profile of Py-BPP measured under N₂ atmosphere.

Figure S5. Pore size distributions of Py-BPP calculated by the NLDFT method.
**Figure S6.** PXRD pattern of Py-BPP.

**Figure S7.** N$_2$ adsorption isotherms (77 K) of Py-PP before and after encapsulation of 10 wt% DMDP dye.
**Figure S8.** Normalized emission spectra Py-PP loaded with different wt% of DMDP ($\lambda_{\text{exc}} = 380$ nm).

**Figure S9.** Photographs of Py-BPP powders loaded with different wt% of DMDP under ambient light.