

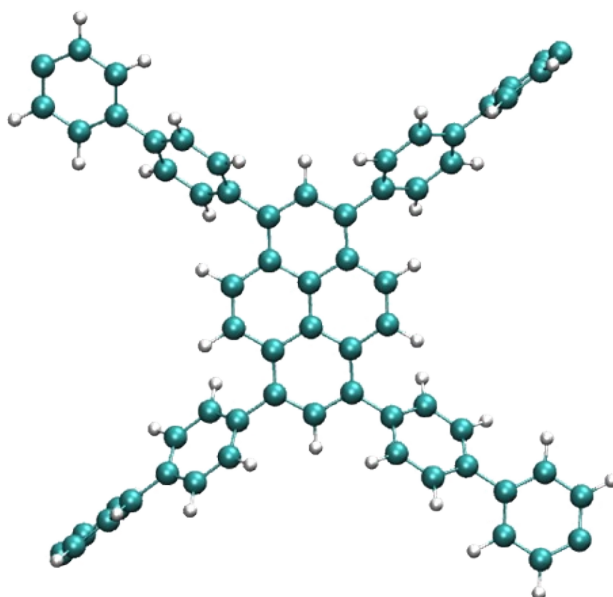
## Supporting Information

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

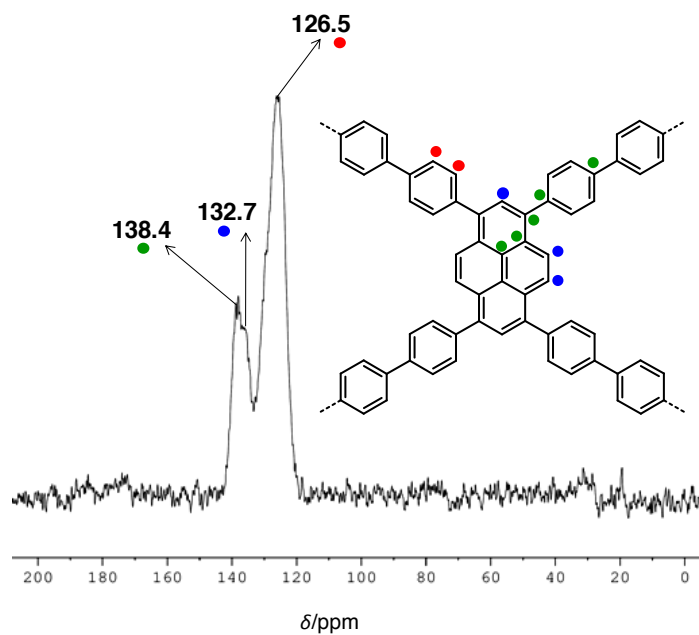
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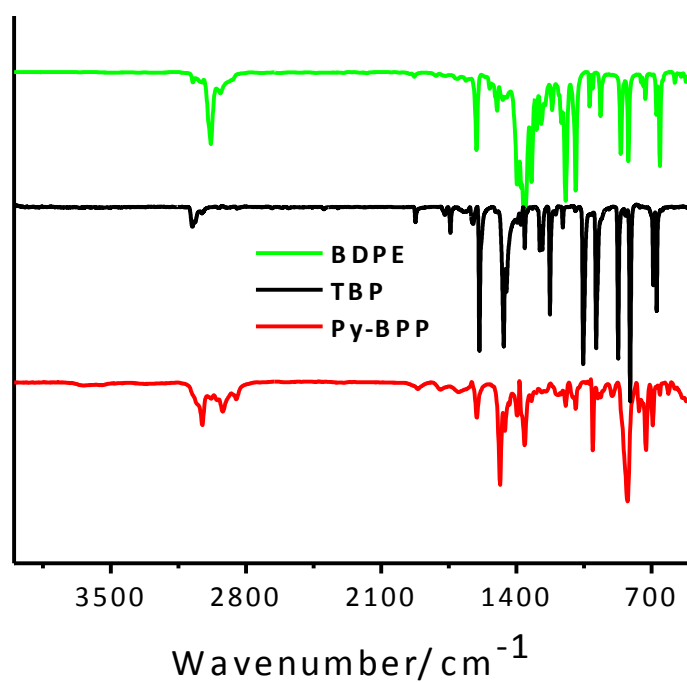
#### Supporting figures:



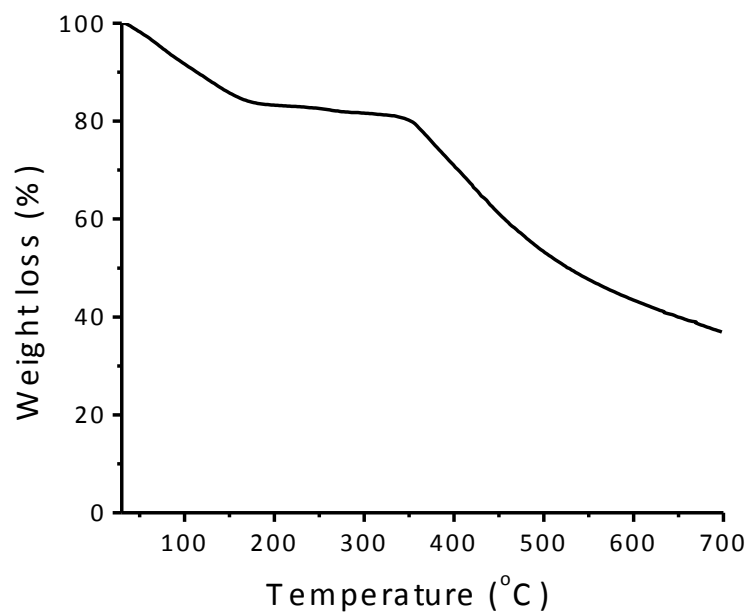
**Figure S1.** Energy minimized geometry of tetra biphenyl pyrene.



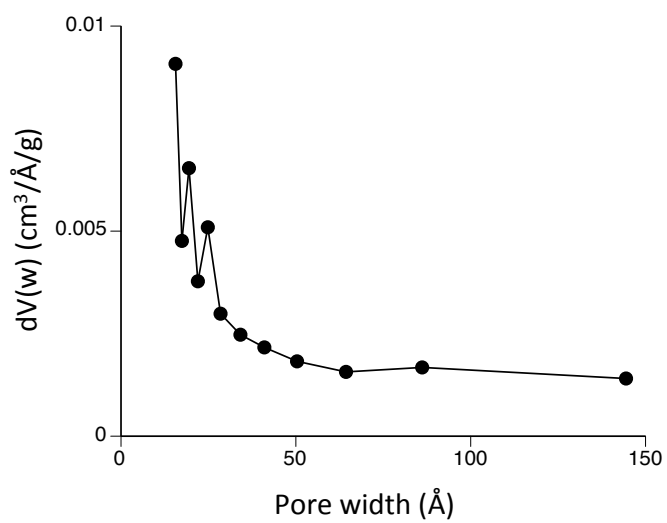
**Figure S2.** Solid-state  $^{13}\text{C}$ -CP-TOSS NMR spectrum of **Py-BPP**.



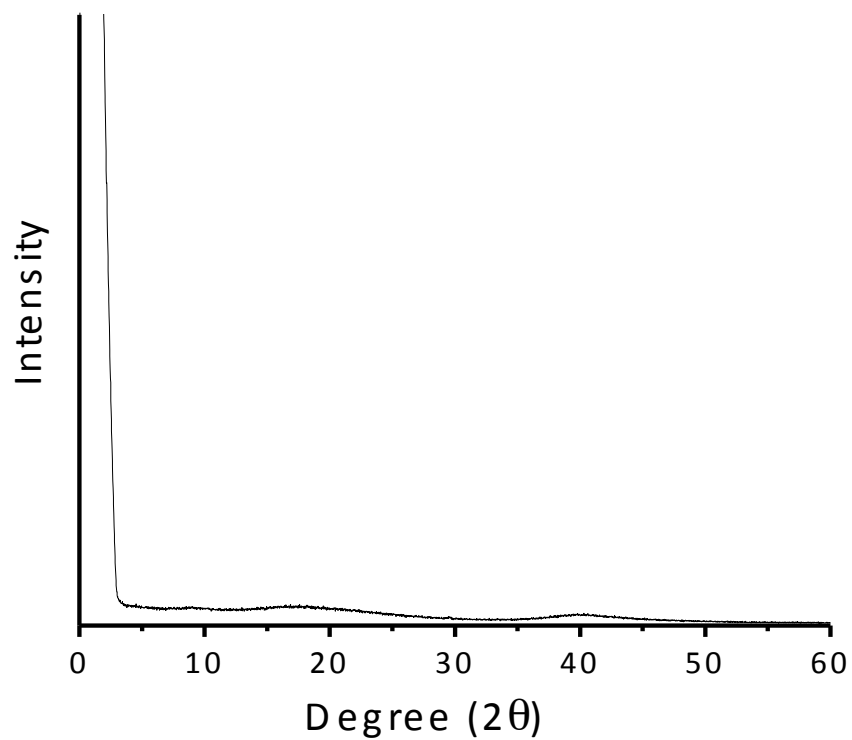
**Figure S3.** Solid-state FT-IR spectra of **BDPE**, **TBP** and **Py-BPP** measured in KBr.



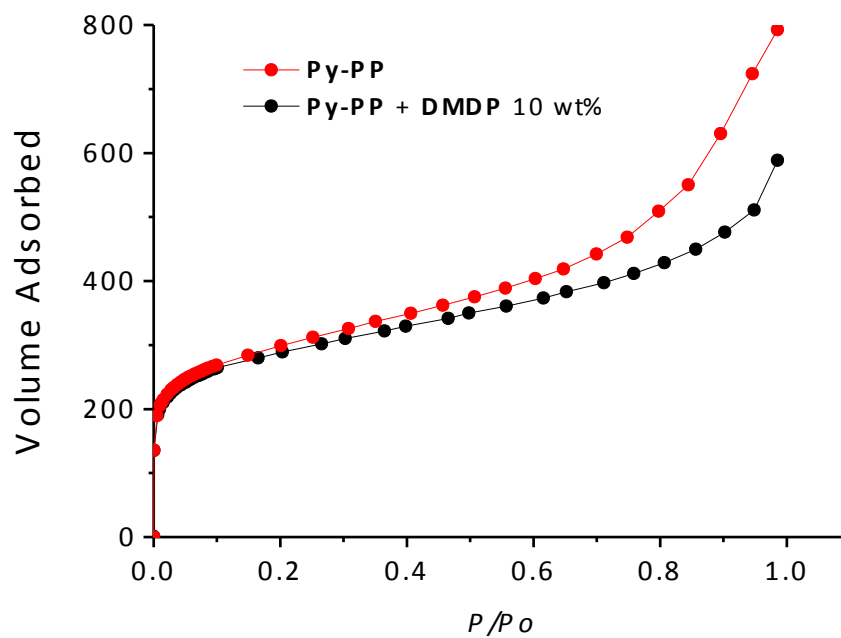
**Figure S4.** TGA profile of **Py-BPP** measured under N<sub>2</sub> atmosphere.



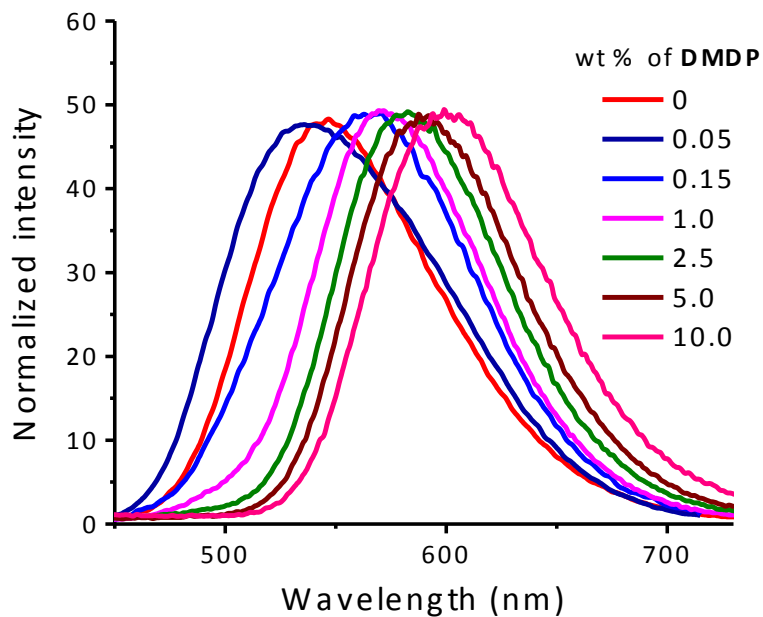
**Figure S5.** Pore size distributions of **Py-BPP** calculated by the NLDFIT method



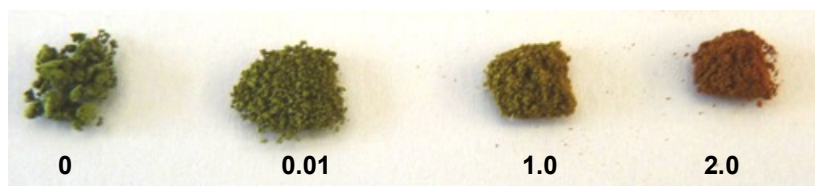
**Figure S6.** PXRD pattern of **Py-BPP**.



**Figure S7.** N<sub>2</sub> 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** ( $\lambda_{\text{exc}} = 380 \text{ nm}$ ).



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