Supporting information

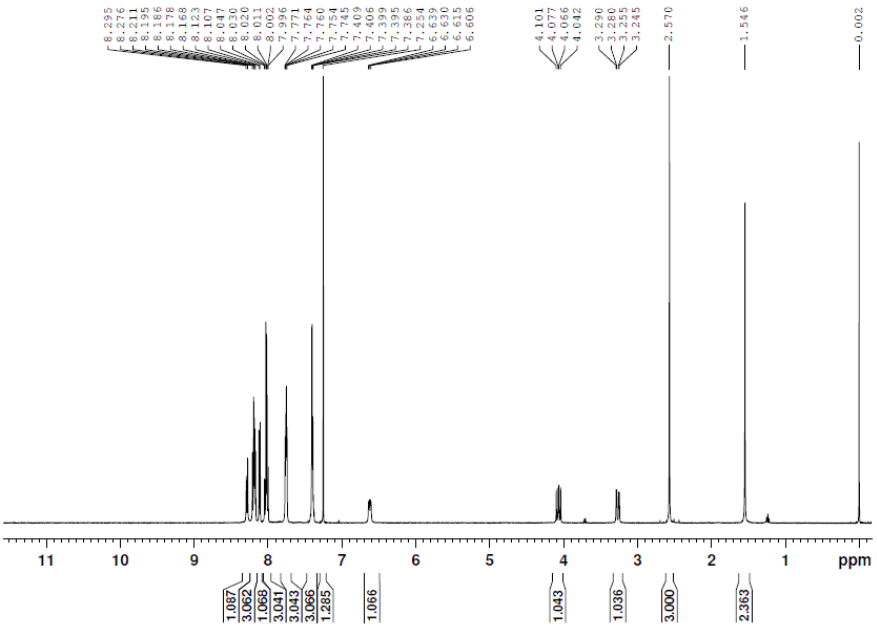

Figure 1S. ^{1}H NMR spectrum of APPP.

Assignments of each H in the NMR spectrum: δ (ppm) 2.57 (CO-CH_3), 3.25-3.29 (one H of CH_2), 4.04-4.10 (another H of CH_2), 6.61-6.64 (CH), 7.39-8.30 (14H, Ar-H from pyrene and benzene rings).

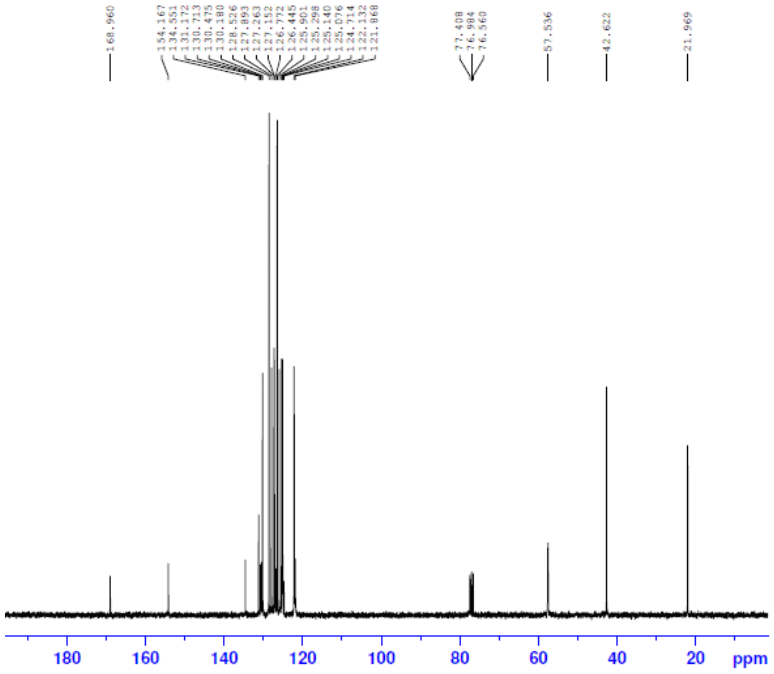

Figure 2S. ^{13}C NMR spectrum of APPP.

Assignments of C in the NMR spectrum: δ (ppm) 21.96 (C*-CO), 42.62 (CH_2), 57.54 (CH-N), 121.00-134.55 (the rest Ar-C from pyrene and benzene rings), 154.17 (C=N), 168.96 (C=O). (21.96 is assigned to C*).

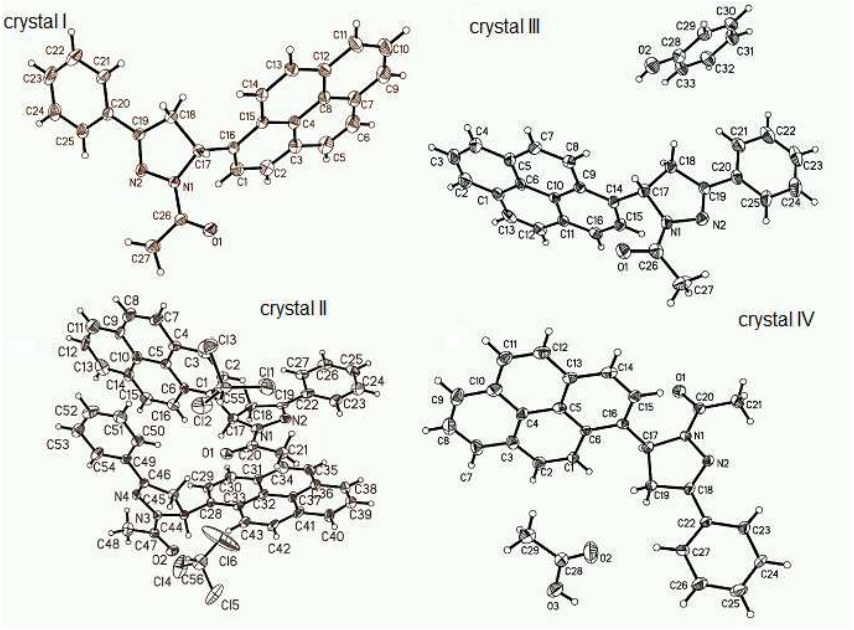

Figure 3S . Thermal ellipsoid plots of crystals I-IV (d) at 20% probability.

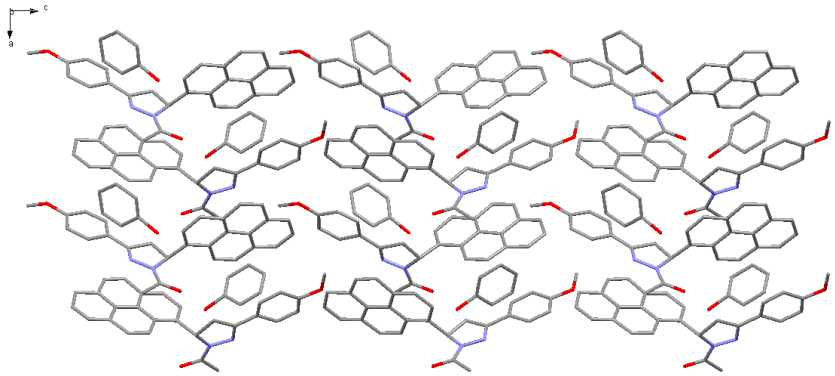

Figure 4S . 3D packing diagram of AMPP • phenol (projected in *ac* plane).

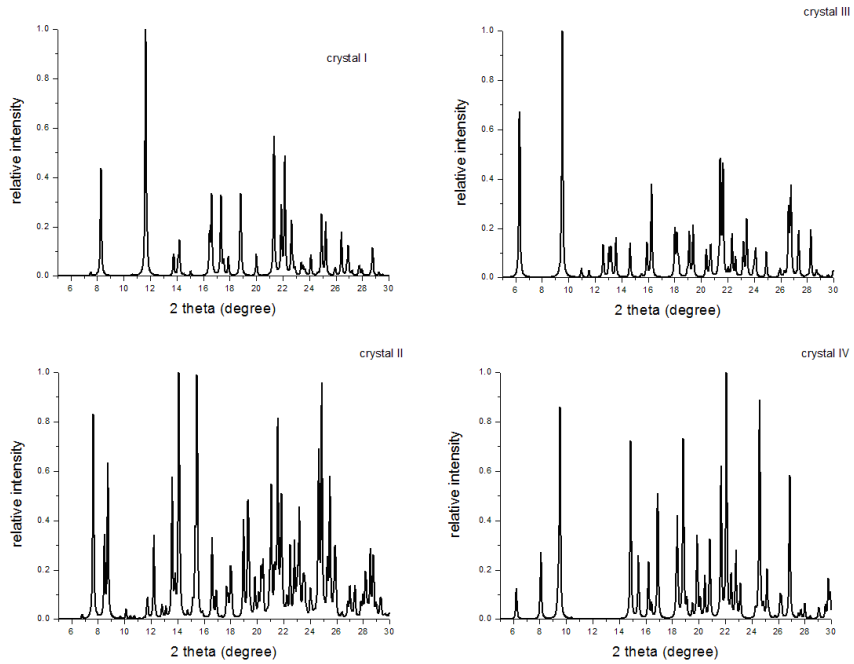

Figure 5S. The simulated PXRD patterns of crystals I-IV.

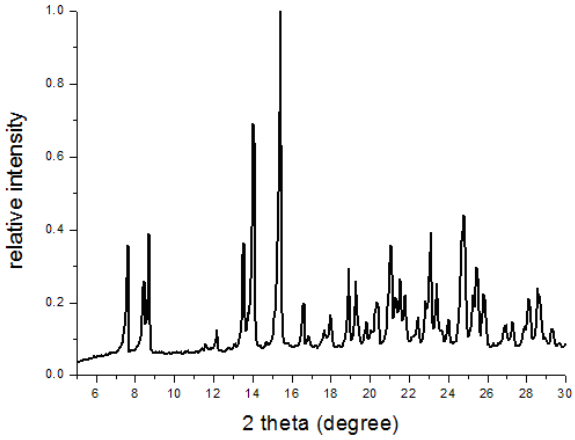

Figure 6S . PXRD pattern for the product of the transformation (in chloroform and petroleum ether)

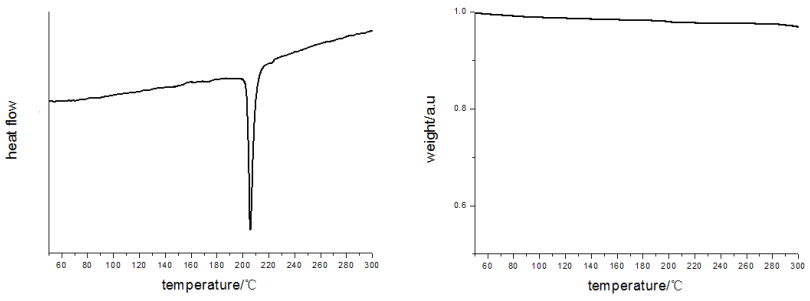

Figure 7S . DSC and TGA profiles of product after the transition (in methanol).

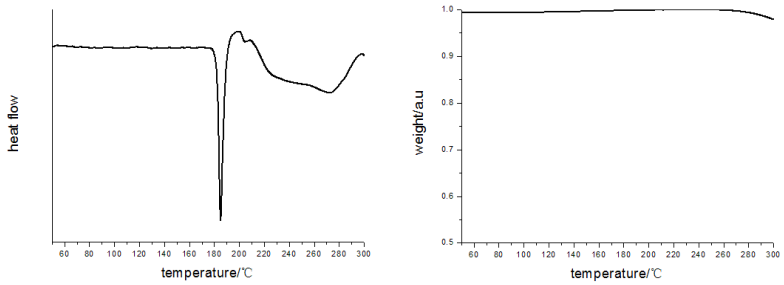

Figure 8S . DSC and TGA profiles of intermediate product during the transition (in methanol).

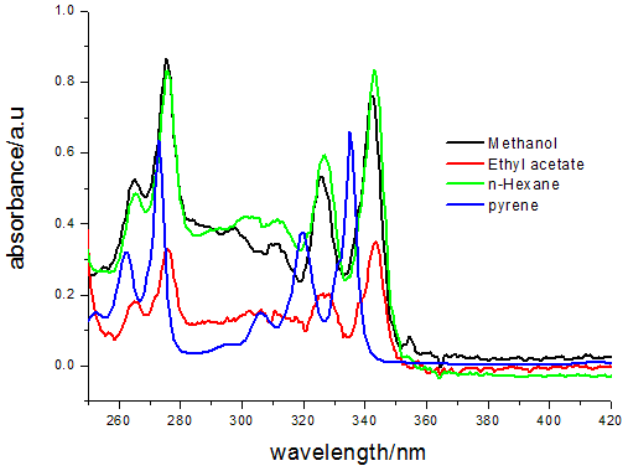

Figure 9S . UV-Vis spectra of APPP in various solvents and pyrene.

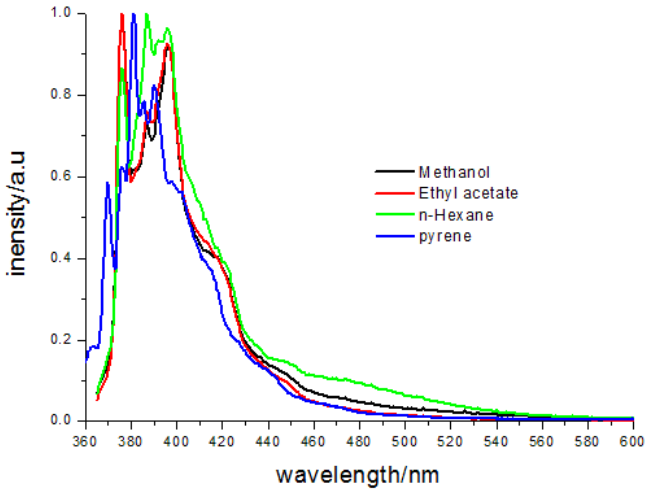

Figure 10S. Fluorescence spectra of APPP in various solvents and pyrene (λ_{ex}=350 nm).

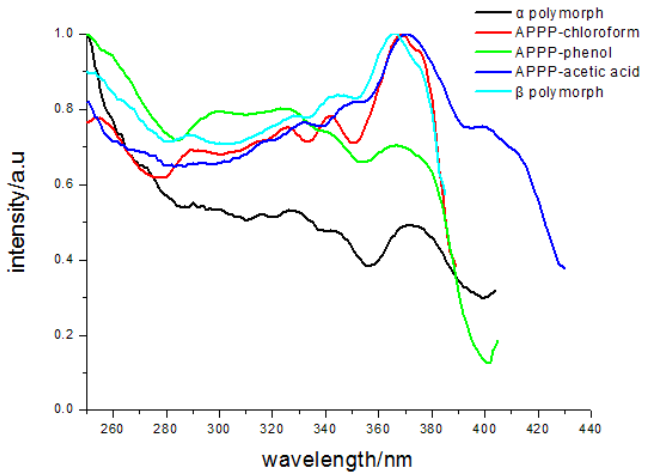

Figure 11S. Excitation spectra for the solids.

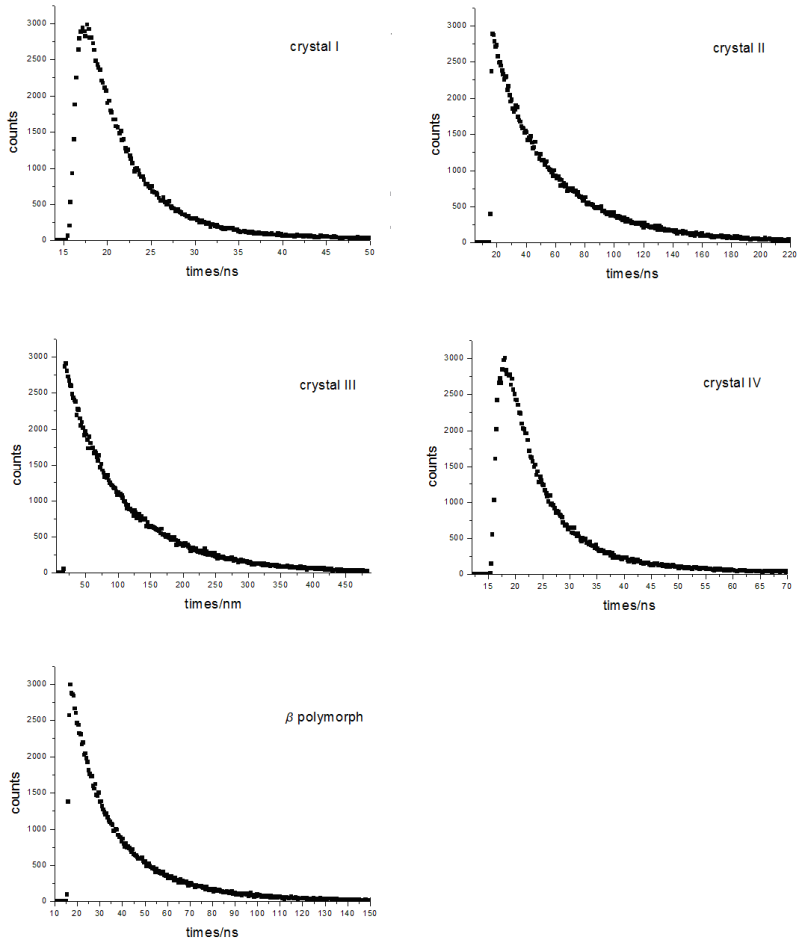

Figure 12S. Fluorescence decay curves for the solids (fluorescence lifetimes were monitored at 340 nm).