

## First supramolecular polytacocomplex

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### Supplemental Material (1 page)

**Synthesis of 3.** 0.82 g (1.5 mmol) N,N'-dihydroxyethyl-4,4'-bipyridinium bis(hexafluorophosphate)<sup>1</sup> and 20 mL (98+%, 180.5 mmol) phenyl isocyanate were added into a single neck flask. This mixture was heated at reflux for 36 hours to produce a yellow mixture. This mixture was washed with chloroform (2 x 25 mL). The resultant solid was recrystallized in water 4 times to produce yellow crystals. These crystals were dried with a vacuum pump for 24 hours to provide pure **3**: 1.22 g (90%), mp 220-221 °C. <sup>1</sup>H NMR (400 MHz, DMSO-d<sub>6</sub>, 25 °C) δ 9.68 (s, broad, 2H), 9.39 (d, *J* = 7.3 Hz, 4H), 8.81 (d, *J* = 7.3 Hz, 4H), 7.34 (d, *J* = 6.8 Hz, 4H), 7.24 (m, 4H), 6.98 (t, *J* = 6.8 Hz, 2H), 5.03 (t, *J* = 5.0 Hz, 4H), 4.67 (t, *J* = 5.0 Hz, 4H). Anal. Calcd for C<sub>28</sub>H<sub>28</sub>O<sub>4</sub>N<sub>4</sub>P<sub>2</sub>F<sub>12</sub>: C, 43.32; H, 3.64; N, 7.23. Found: C, 43.60; H, 3.69; N, 7.15.

#### Reference:

1 W. S. Bryant, J. W. Jones, P. E. Mason, I. A. Guzei, A. L. Rheingold, D. S. Nagvekar and H. W. Gibson, *Org. Lett.* 1999, **1**, 1001-1004.