Supporting Information

Materials and measurements. Acetonitrile was purchased from 6 different companies, i.e, Sigma-aldrich, alfa, Samchun, TCI, Kanto, and Junsei. All anions were used as a form of tetrabutylammonium salt, which have used as received from Sigma-aldrich. Electronic absorption spectra were recorded on a JASCO model V-660 spectrometer. Fluorescence emission spectra were recorded on a JASCO model FP-6300 spectrometer.

Spectroscopic titration of cyanide to 1 and ZnTPP

![Figure S1. Spectroscopic titration of 1 with CN⁻ in purified MeCN at 25 °C. [1] = 3.90 x 10⁻⁶ M, [TBA-CN]/[1] = 0-3.0, 1 cm thick optical cell; Δ Abs was monitored at 439 nm (K = 2.12x10⁷); solid arrow pointing out isosbestic points.](image-url)
Figure S2. Spectroscopic titration of ZnTPP with CN⁻ in purified MeCN at 25 °C