Electrochemically-Driven Formation of a Molecular Capsule around the Ferrocenium Ion

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SUPPORTING INFORMATION

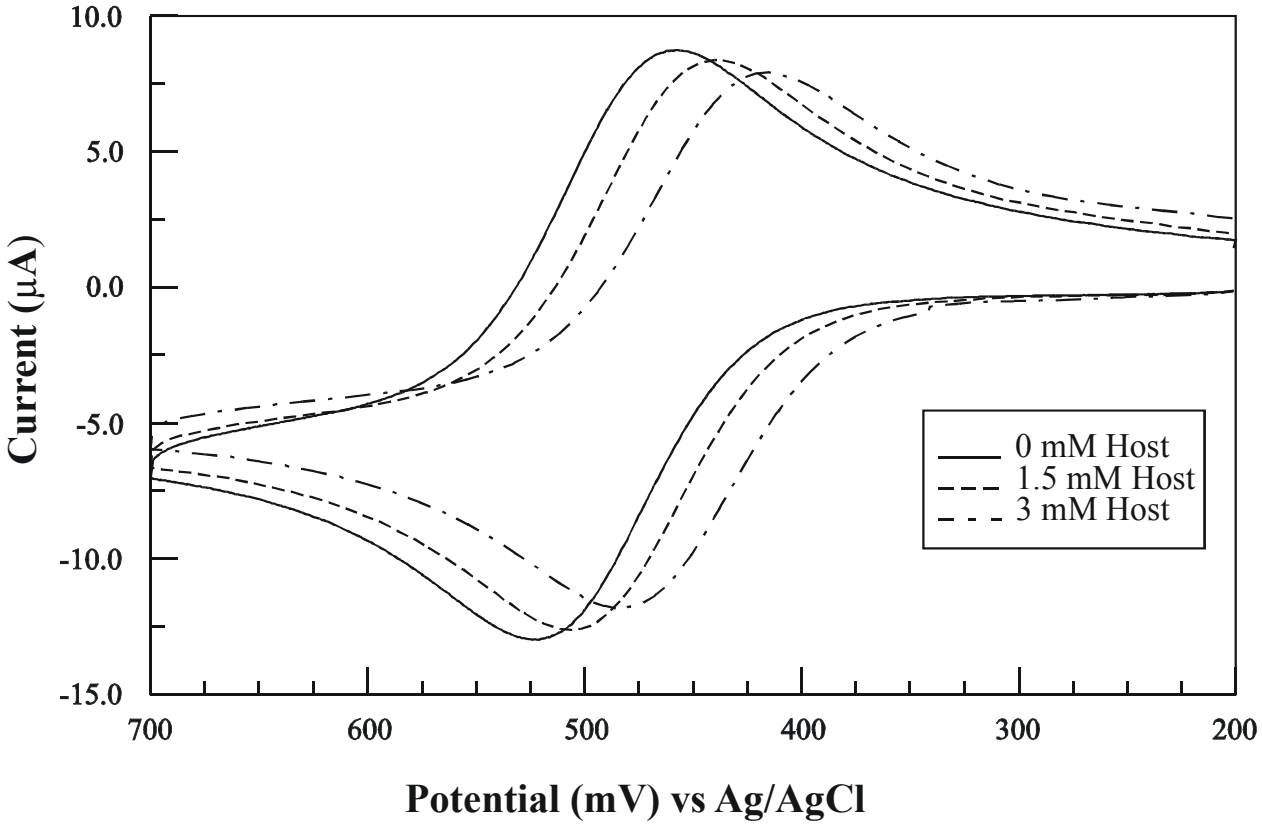

Figure SI1. Cyclic voltammetric response on glassy carbon (0.071 cm^2) of a CH_2Cl_2 solution containing 0.5 mM ferrocene, variable concentrations of host **2** and 0.1M $TDA^+ \cdot PF_6^-$. Scan rate: 0.1 V/s. From digital simulations, we estimate that the binding constant between ferrocenium and **2** is 40 $\pm$ 15 L/mol.

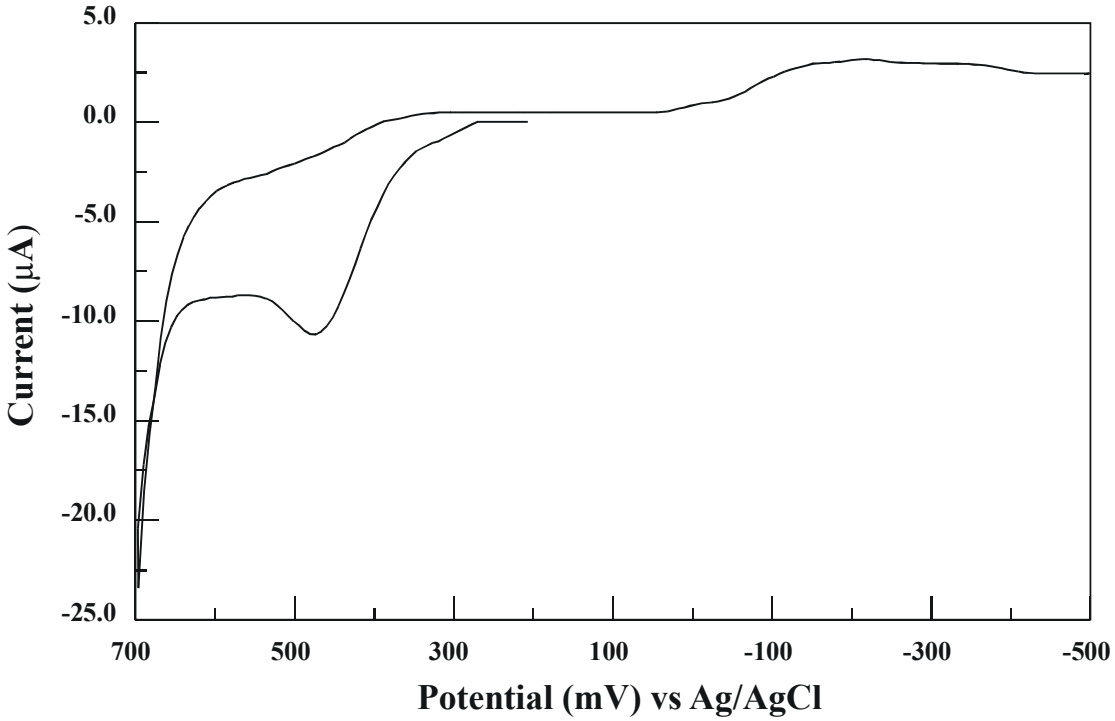

Figure SI2. Cyclic voltammetric response with an extended cathodic scan. The solution contains 0.5 mM ferrocene, 3.0 mM host **2** and 0.1 M $TDA^{+}Br^{-}$ in CH_2Cl_2. Scan rate: 0.1 V/s.

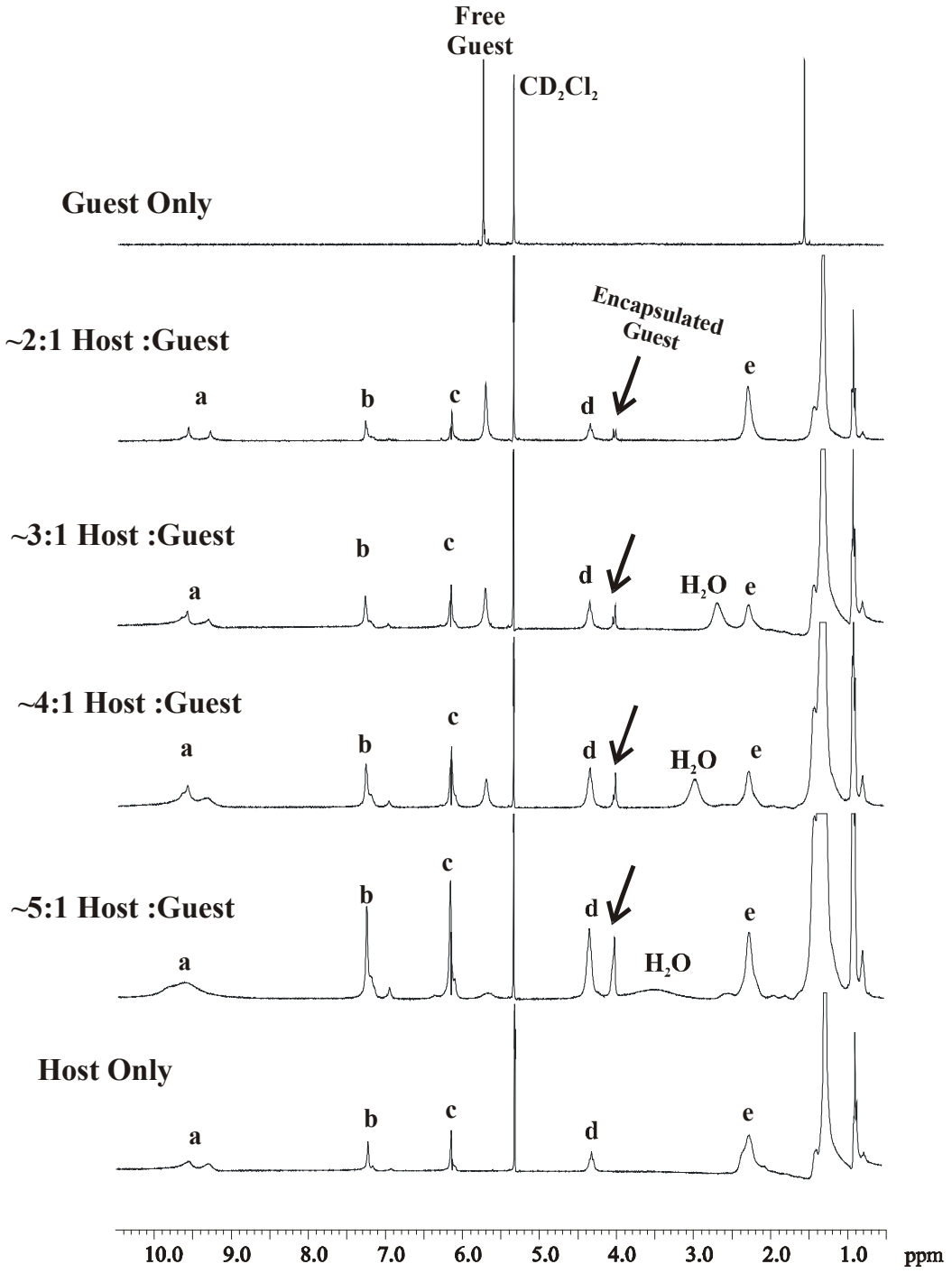

Figure SI3. ^{1}H NMR spectra (400 MHz, CD_2Cl_2) of guest **Cob**$^+$·PF_6^- and host **2** at various relative concentrations. For proton assignments, see Chart 1.

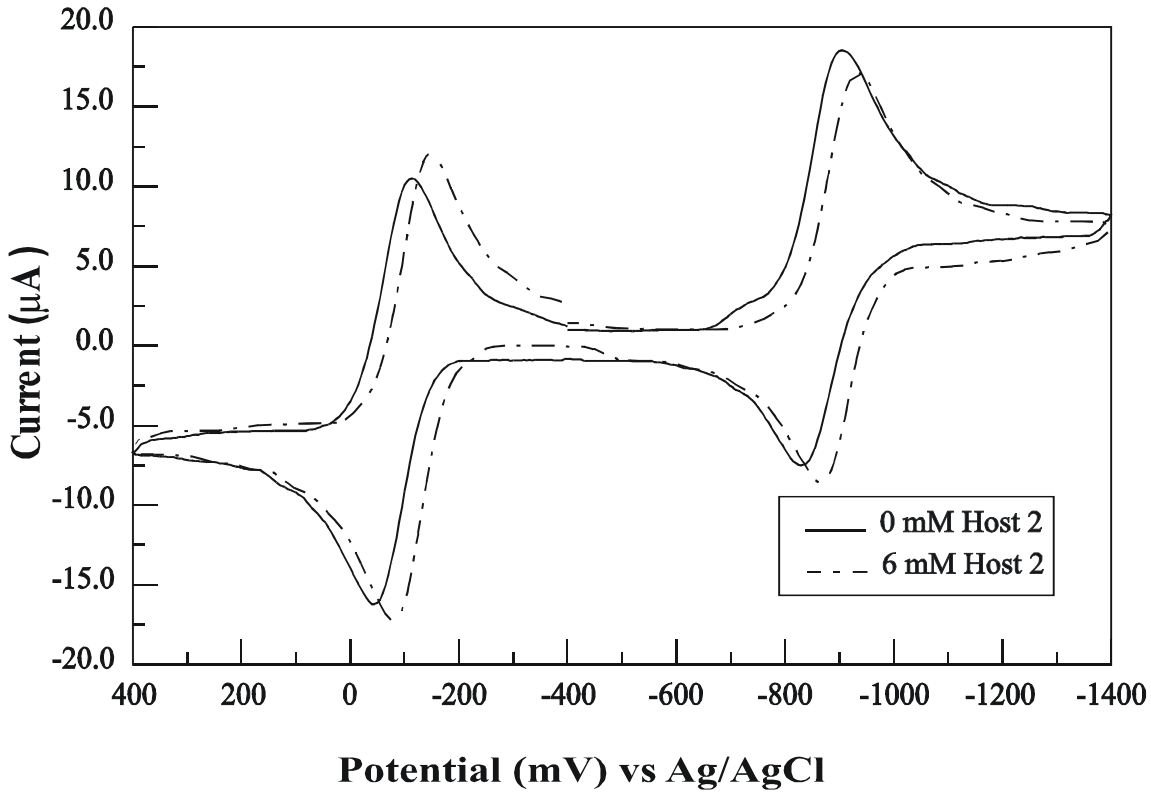

Figure SI4. Cyclic voltammetric response on a glassy carbon electrode (0.071 cm^2) of a 0.1 M $TBA^+ \cdot PF_6^-/CH_2Cl_2$ solution containing 1.0 mM decamethylferrocene, 1.0 mM **Cob**$^+ \cdot PF_6^-$ and variable concentrations of host **2**. Scan rate: 0.1 V/s.