

SUPPORTING INFORMATION

Acid-Catalyzed Hydrolysis of Hexacyanoferrate (III) to Prussian Blue *via* Sequential Mechanism

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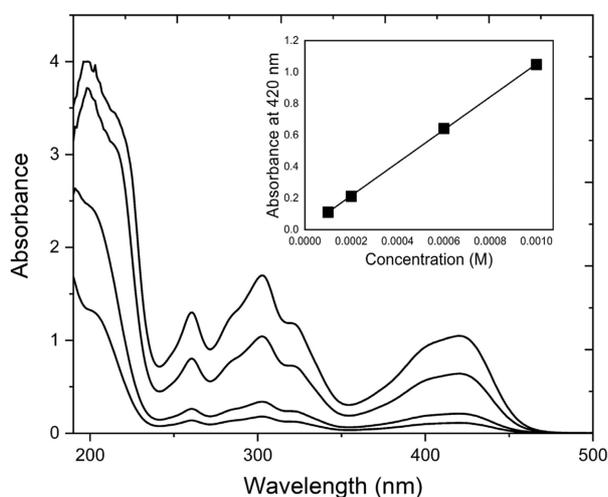


Figure S1. UV-vis spectra for the determination of the molar absorptivity (ϵ) of potassium hexacyanoferrate (III) at 420 nm at room temperature. Inset: A graph of absorbance at 420 nm vs. concentration.

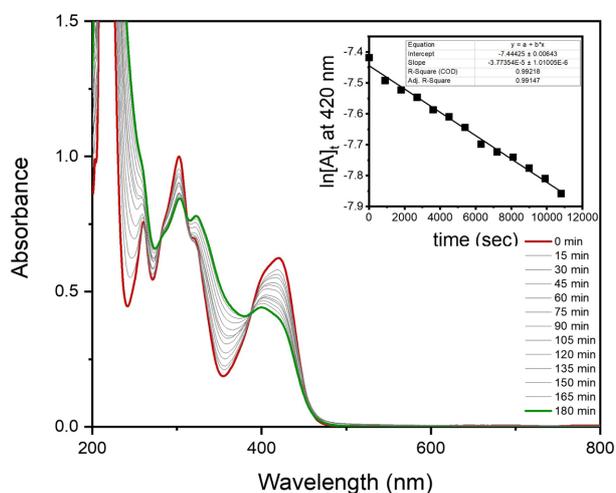


Figure S3. Time-based UV-vis spectra of the hydrolysis of potassium hexacyanoferrate (III) in 1.0 M HCl aqueous solution at 60 °C (reaction 2). Inset: A graph of $\ln[A]_t$ vs. t (s).

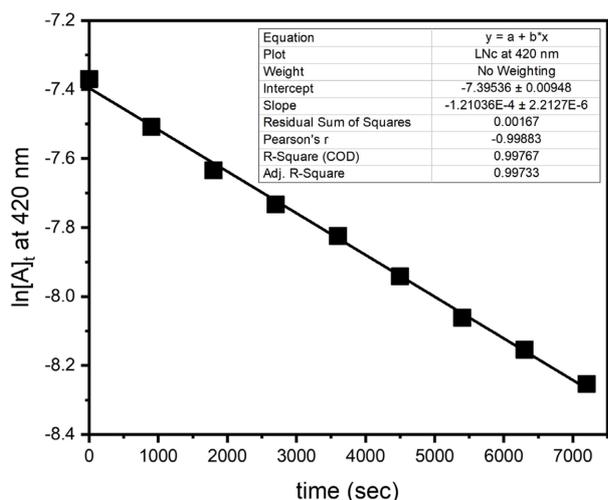


Figure S2. A graph of $\ln[A]_t$ vs. t (s) obtained from the time-based UV-vis spectra of the hydrolysis of potassium hexacyanoferrate (III) in 1.0 M HCl aqueous solution at 60 °C (reaction 1).

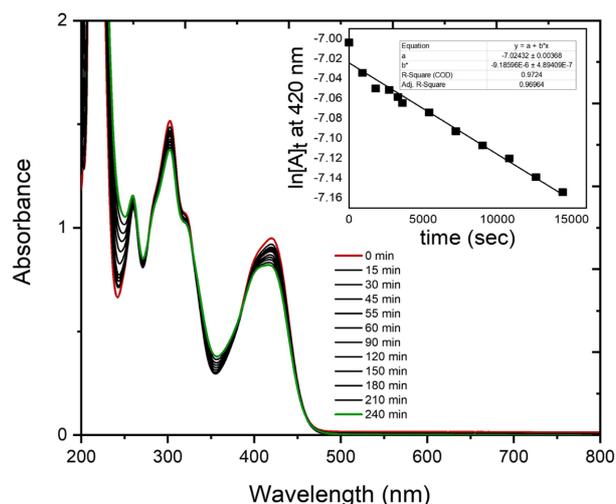


Figure S4. Time-based UV-vis spectra of the hydrolysis of potassium hexacyanoferrate(III) in 1.0 M HCl aqueous solution at 50 °C (reaction 3). Inset: A graph of $\ln[A]_t$ vs. t (s).

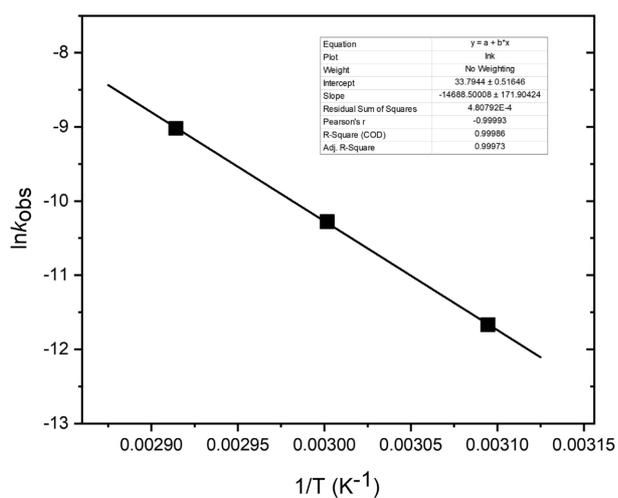


Figure S5. An Arrhenius plot to obtain the kinetic data utilizing the UV-vis spectra of reactions 1-3.

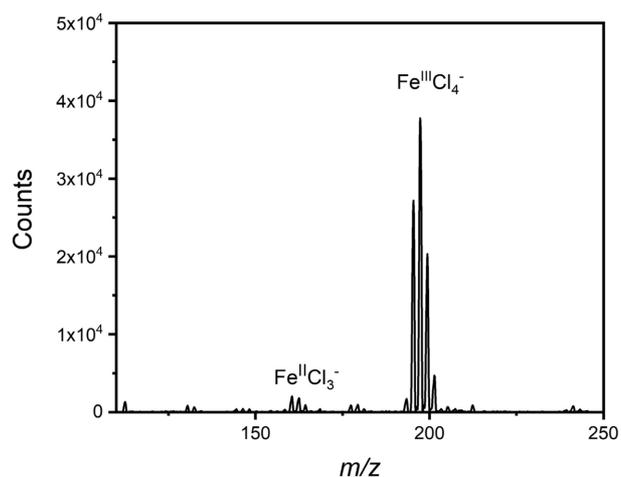


Figure S7. A negative-ion mode liquid chromatography-electrospray ionization-mass (LC-ESI MS) mass spectrum of 6.0×10^{-4} M iron (III) chloride ($\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$) in 1.0 M HCl aqueous solution.

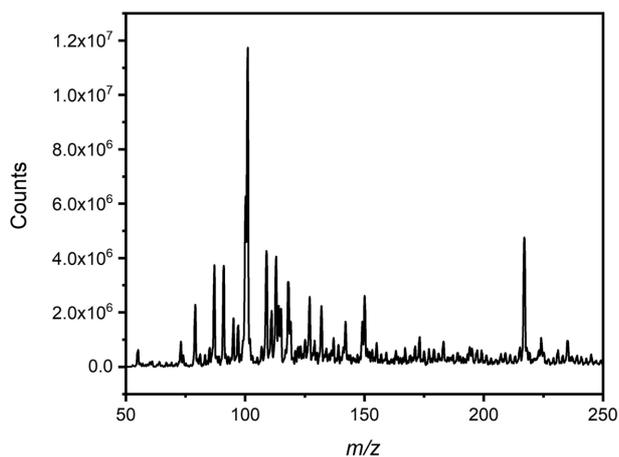


Figure S6. A positive-ion mode liquid chromatography-electrospray ionization-mass (LC-ESI MS) spectrum after reaction 1 in 1.0 M HCl aqueous solution.