

Model-Based Analysis of Coupled Equilibrium-Kinetic Processes: Indirect Kinetic Studies of Thermodynamic Parameters Using the Dynamic Data

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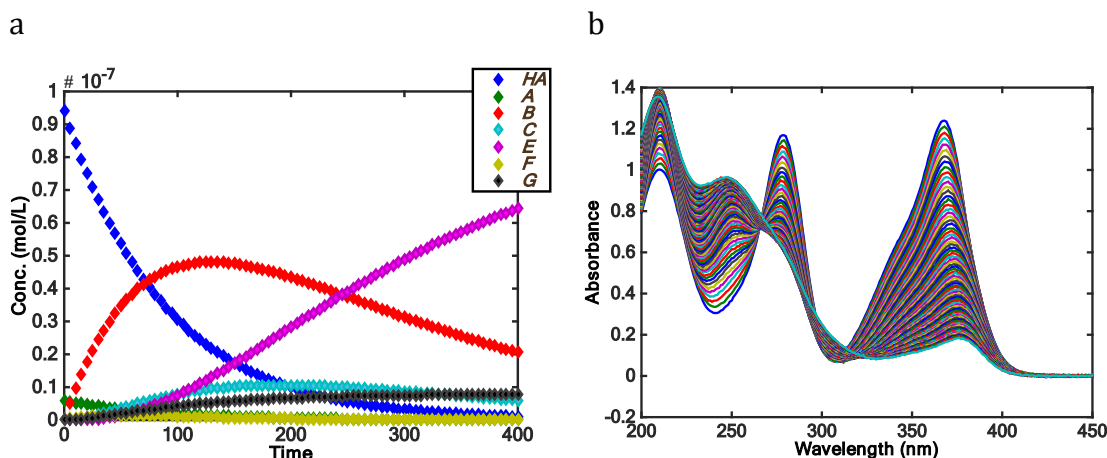


Figure S1. (a) Simulated concentration profiles for $C_{AML}^0 = 1.00 \times 10^{-7}$ M and $pH = 7.50$ with $K_a^{AML} = 2.00 \times 10^{-9}$, $k_1 = 1.10 \times 10^{-2} \text{ s}^{-1}$, $k_2 = 5.00 \times 10^{-3} \text{ s}^{-1}$, $k_3 = 2.10 \times 10^{-2} \text{ s}^{-1}$, $k_4 = 1.50 \times 10^{-2} \text{ s}^{-1}$ and $k_5 = 3.50 \times 10^{-2} \text{ s}^{-1}$; (b) Simulated dataset.

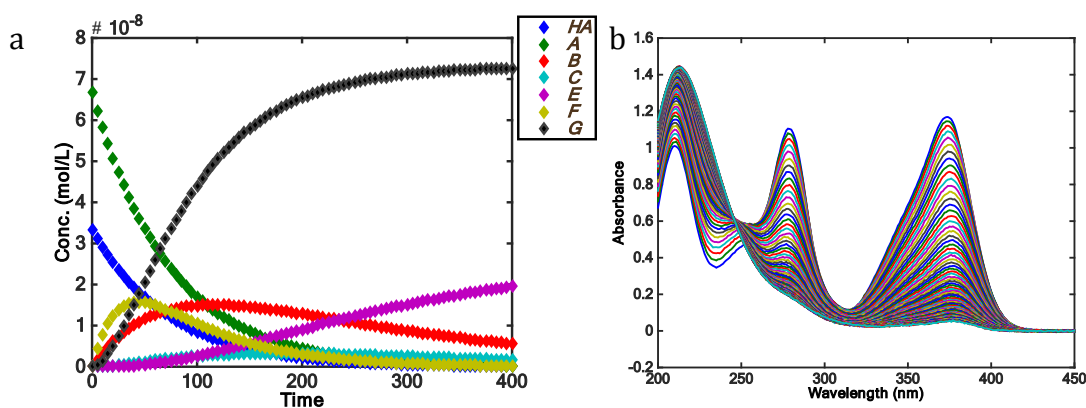


Figure S2. (a) Simulated concentration profiles for $C_{AML}^0 = 1.00 \times 10^{-7}$ M and $pH = 9.00$ with $K_a^{AML} = 2.00 \times 10^{-9}$, $k_1 = 1.10 \times 10^{-2} \text{ s}^{-1}$, $k_2 = 5.00 \times 10^{-3} \text{ s}^{-1}$, $k_3 = 2.10 \times 10^{-2} \text{ s}^{-1}$, $k_4 = 1.50 \times 10^{-2} \text{ s}^{-1}$ and $k_5 = 3.50 \times 10^{-2} \text{ s}^{-1}$; (b) Simulated dataset.

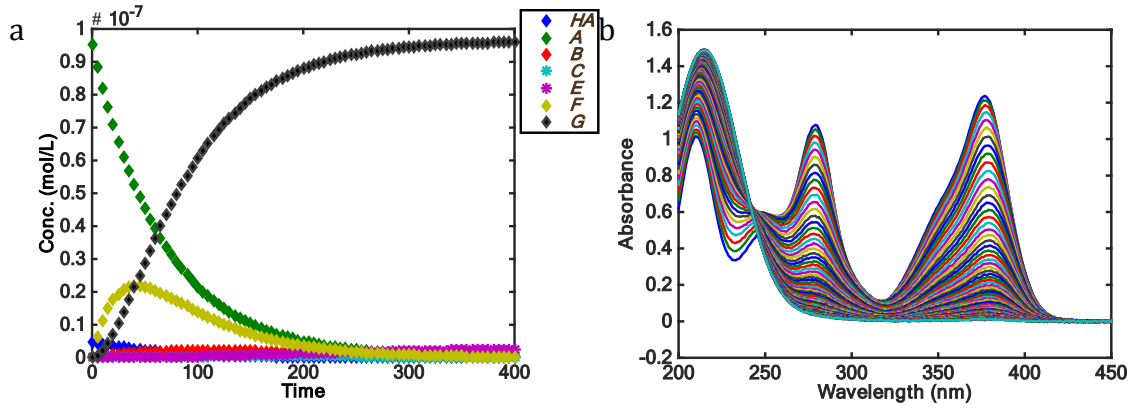


Figure S3. (a) Simulated concentration profiles for $C_{AML}^0 = 1.00 \times 10^{-7}$ M and $pH = 10.00$ with $K_a^{AML} = 2.00 \times 10^{-9}$, $k_1 = 1.10 \times 10^{-2} \text{ s}^{-1}$, $k_2 = 5.00 \times 10^{-3} \text{ s}^{-1}$, $k_3 = 2.10 \times 10^{-2} \text{ s}^{-1}$, $k_4 = 1.50 \times 10^{-2} \text{ s}^{-1}$ and $k_5 = 3.50 \times 10^{-2} \text{ s}^{-1}$; (b) Simulated dataset.