

Supplemental Information for “Nucleation and Growth Kinetics Estimation for L-Phenylalanine Hydrate and Anhydrate Crystallization”

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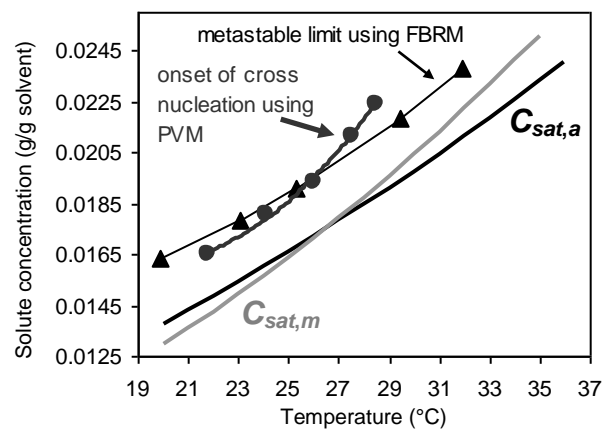


Figure S1. L-phe solubility and metastable limits.

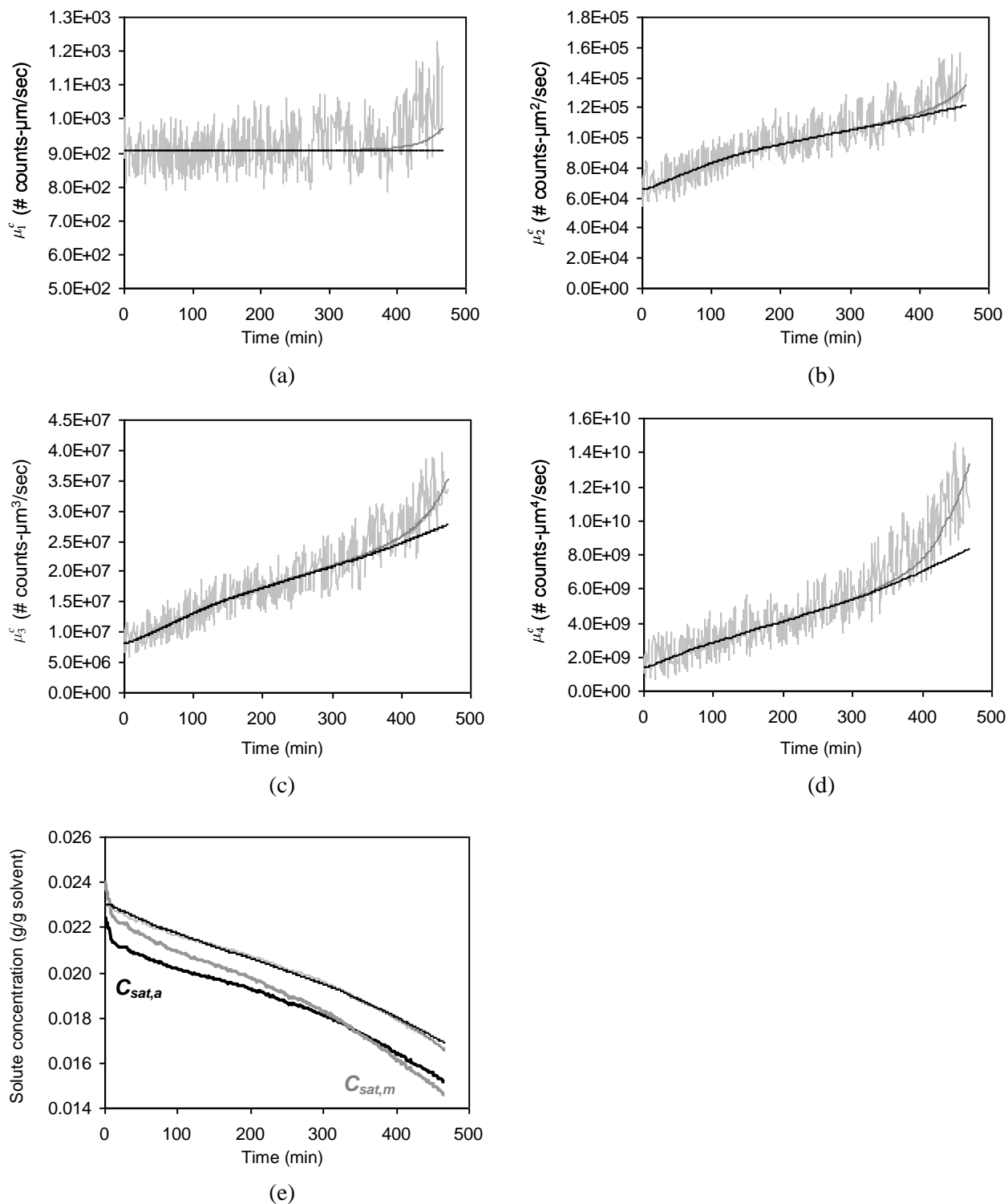


Figure S2. Run 2 moments and solute concentration, experimental (-); Stage 1 model (-); Stage 3 model (-):
(a) μ_1^c , (b) μ_2^c , (c) μ_3^c , (d) μ_4^c , (e) C . The solubility of each crystal form computed from the measured temperature is shown as thick grey and black lines in (e).

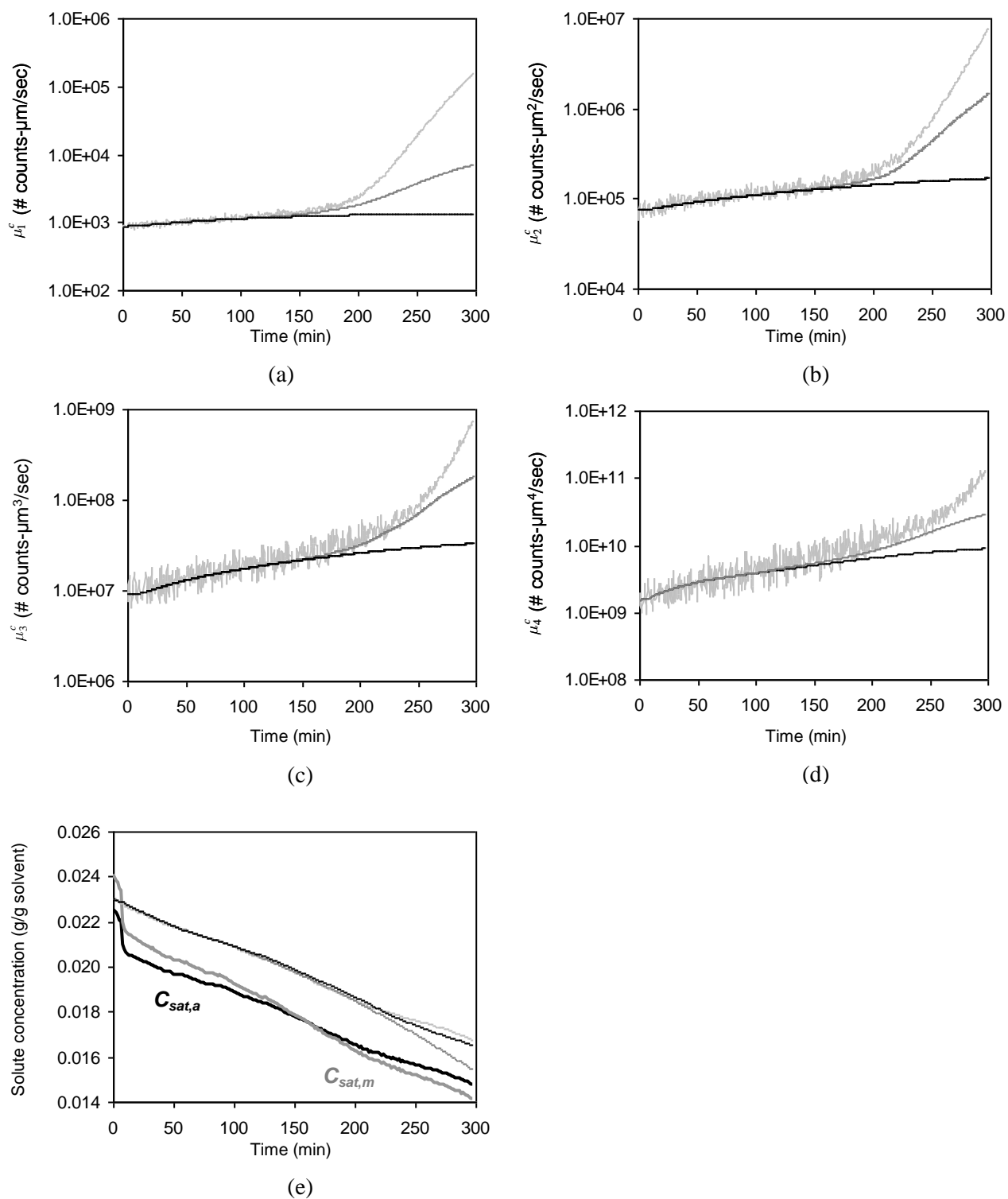


Figure S3. Run 1 moments and solute concentration, experimental (-); Stage 1 and 2 models (-); Stage 3 model (-): (a) μ_1^c , (b) μ_2^c , (c) μ_3^c , (d) μ_4^c , (e) C . The solubility of each crystal form computed from the measured temperature is shown as thick grey and black lines in (e).

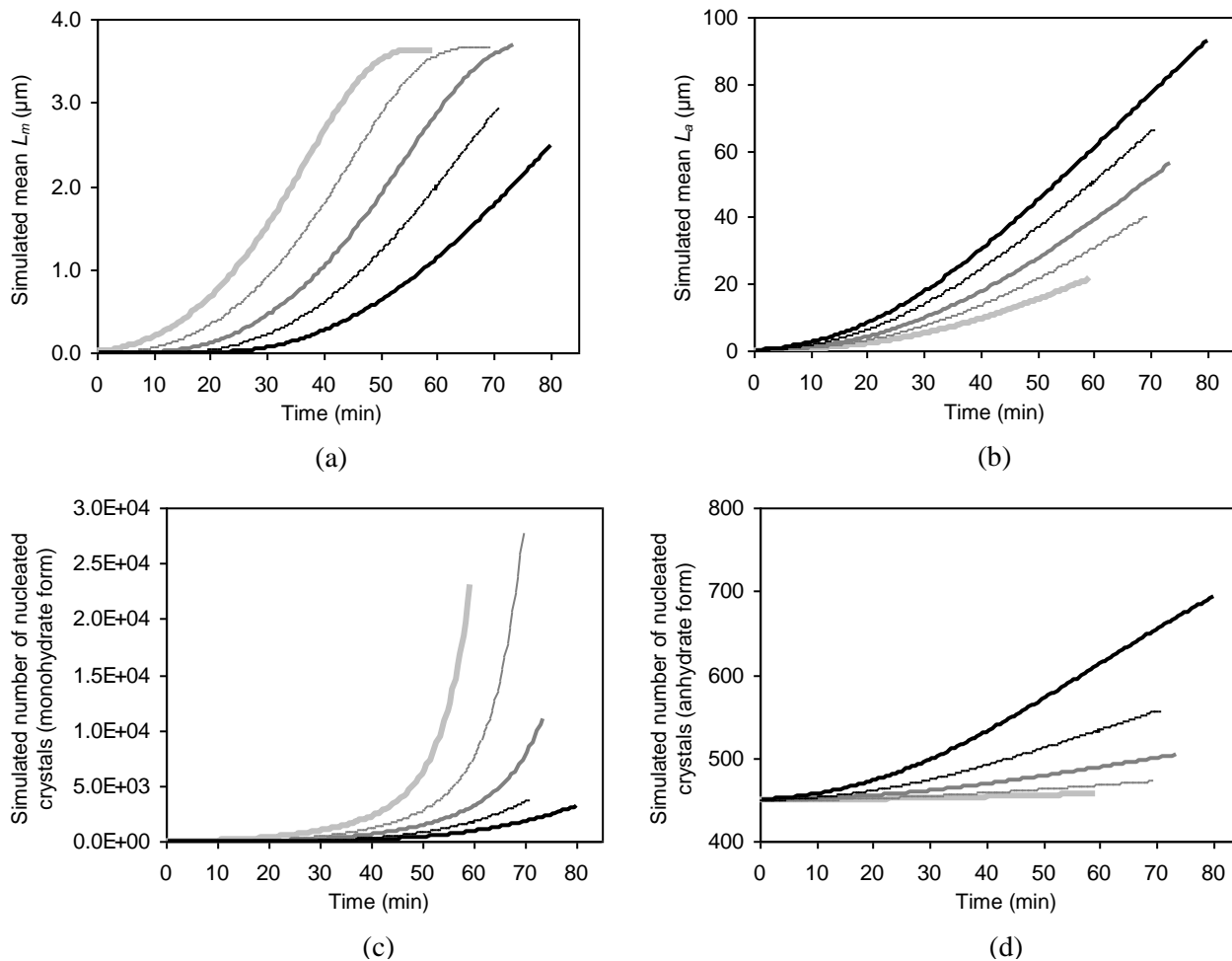


Figure S4. Simulated profiles for Run 1m (-), 2m (-), 3m (-), 4m (-), and 5m (-): (a) mean L_m (μm), (b) mean L_a (μm), (c) number of nucleated crystals (monohydrate form), and (d) number of nucleated crystals (anhydrate form).

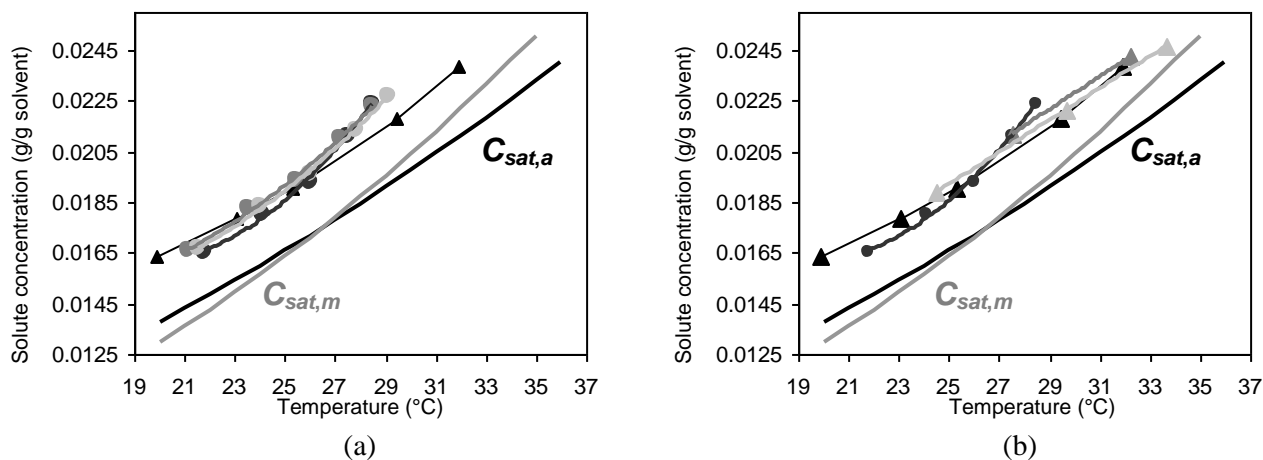


Figure S5. Comparison of experimental metastable limits by FBRM (\blacktriangle) and PVM (\bullet) to simulated results: (a) at mean L_m 2.0 μm (\bullet) and 2.5 μm (\bullet), (b) at 10% (\blacktriangle) and 20% (\blacktriangle) increase in the number of nucleated anhydrate crystals.