

Electronic Supplementary Information

Investigations on Growth Intensification of *p*-Toluamide Crystal

Based on Growth Rate Analysis and Molecular Simulation

Hao Wu,^a Jingkang Wang,^{ab} Fei Li,^{*ab} Qi Liu,^a Shuyi Zong,^a Jingtao Bi,^a Na Wang,^a Guoqiang Shan,^c and Hongxun Hao^{*ab}

^a National Engineering Research Centre of Industrial Crystallization Technology, School of Chemical Engineering and Technology, Tianjin University, Tianjin, 300072, P R China.

*E-mail: lifeijessie@tju.edu.cn, hongxunhao@tju.edu.cn.

^b Collaborative Innovation Centre of Chemical Science and Engineering, Tianjin, P R China.

^c The College of Environmental Science and Engineering, Nankai University, Tianjin 300072, China

Table of Contents

Table S1. Experimental mole fraction solubility of *p*-Toluamide in methanol from 293.1 K to 308.1 K under $p = 101.3$ KPa.

Fig. S1. The schematic diagram of the model size (d_c , d_s , $U \times V$ and d_v).

Fig. S2. X-ray power diffraction patterns of *p*-toluamide crystals in methanol at 299.1 K without (A0) and with different additives (A1-A4).

Fig. S3. ¹³C solid-state NMR spectra of *p*-toluamide crystals without (A0) and with different additives (A1-A4).

Table S1. Experimental mole fraction solubility of *p*-Toluamide in methanol from 293.1 K to 308.1 K under $p = 101.3$ kPa.^a

T / K	293.1	298.1	303.1	308.1
x	0.0271	0.0308	0.0358	0.0414

^a Standard uncertainties are $u(T) = 0.05$ K and $u(p) = 0.3$ kPa. Relative standard uncertainty is $ur(x) = 0.05$.

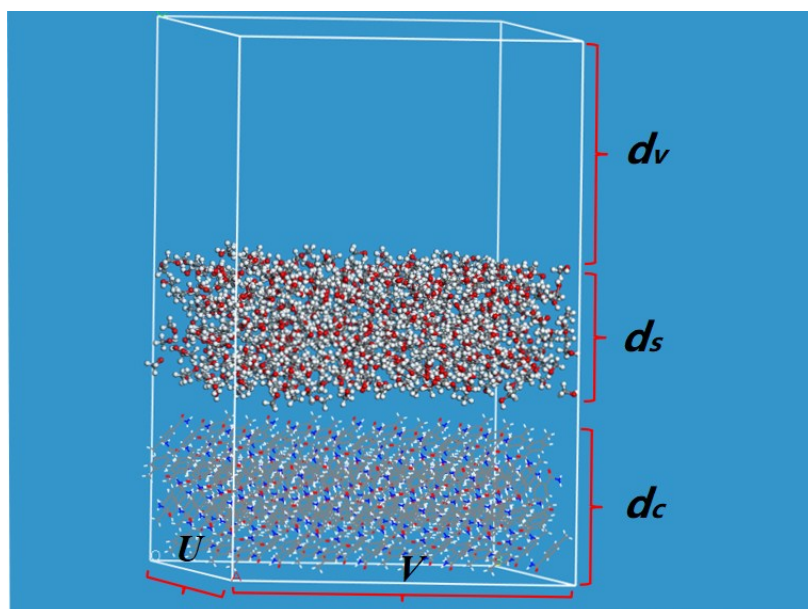


Fig.S1 The schematic diagram of the model size (d_c , d_s , $U \times V$ and d_v).

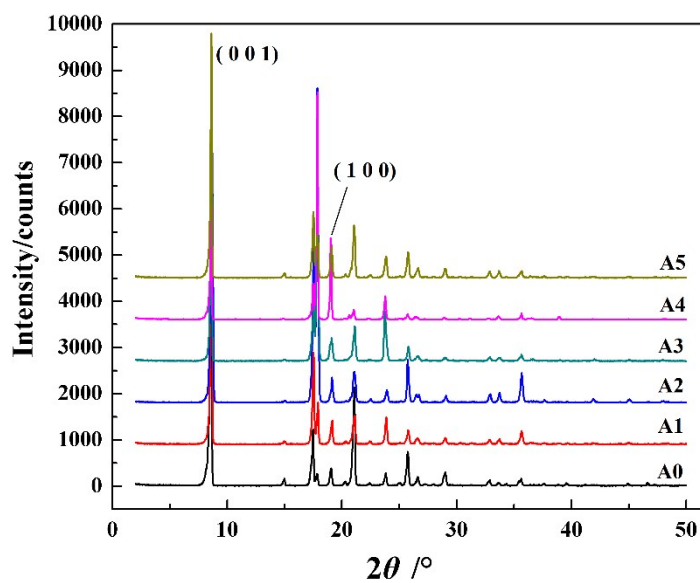


Fig. S2 X-ray power diffraction patterns of *p*-toluamide crystals in methanol at 299.1 K without (A0) and with different additives (A1-A4).

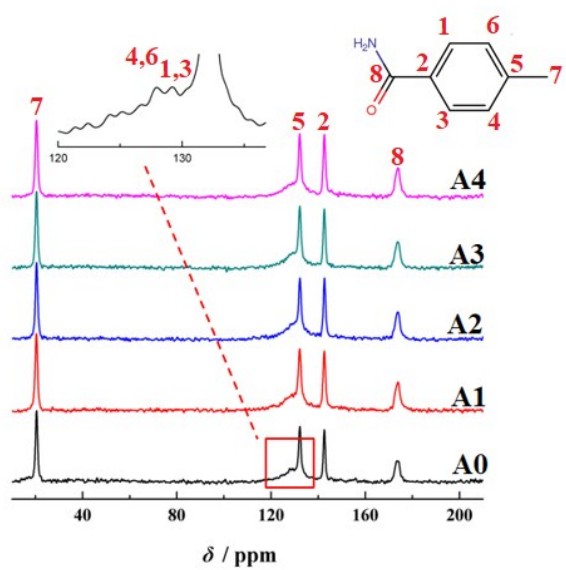


Fig. S3 ^{13}C solid-state NMR spectra of *p*-toluamide crystals without (A0) and with different additives (A1-A4).