

Supporting Information

Highly efficient pollutants removal of graphitic carbon nitride by synergistic effect of adsorption and photocatalytic degradation

Xueping Song, Qin Yang, Mengyun Yin, Dan Tang and Limei Zhou*

Chemical Synthesis and Pollution Control Key Laboratory of Sichuan Province, China West Normal
University, Nanchong 637002, Sichuan, China.

Corresponding Author:*Tel: +86-817-2568081. E-mail: cwnuzhoulimei@163.com.

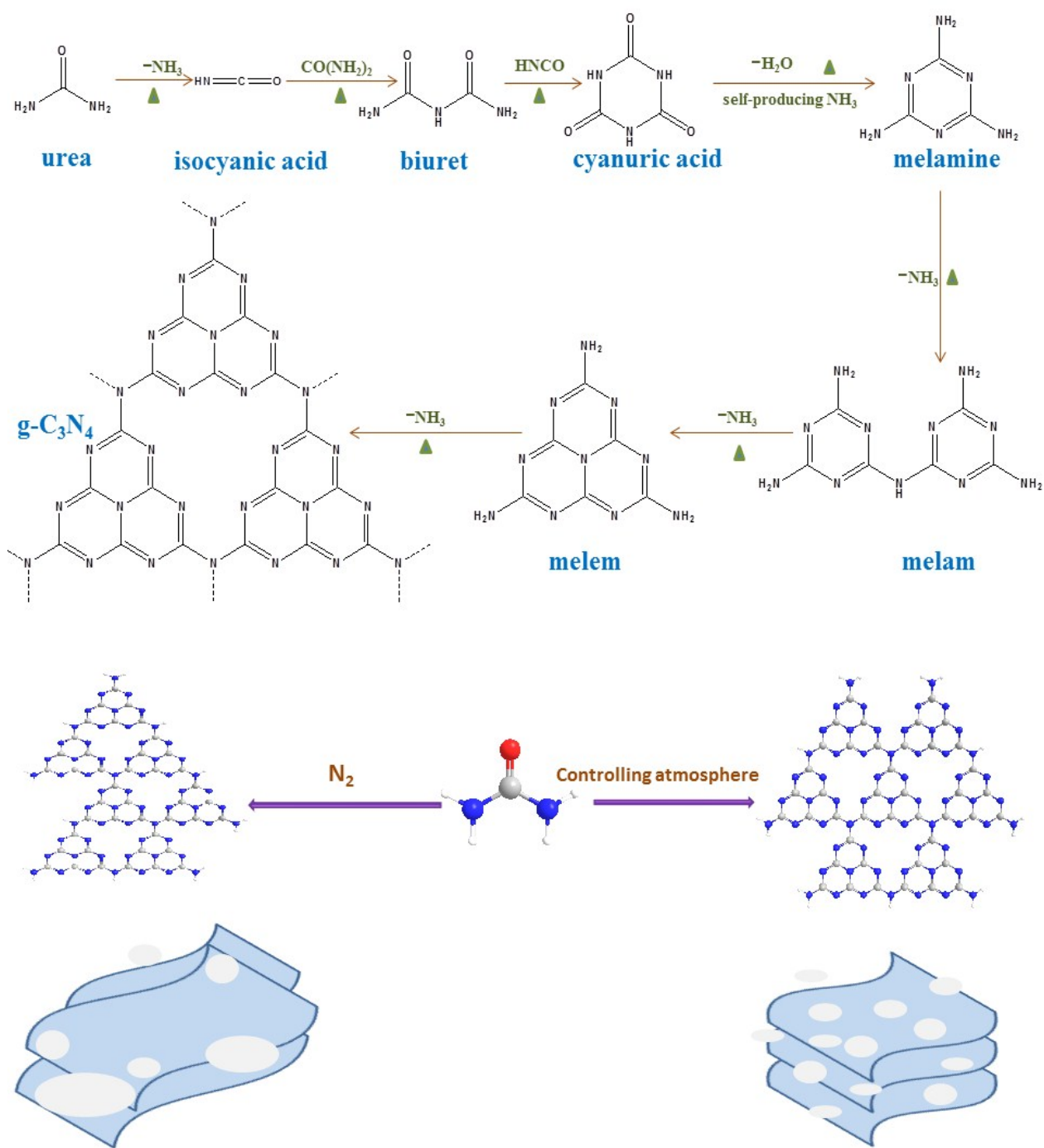


Fig. S1. Proposed mechanism of the reaction path for self-condensation of urea into g-C₃N₄.

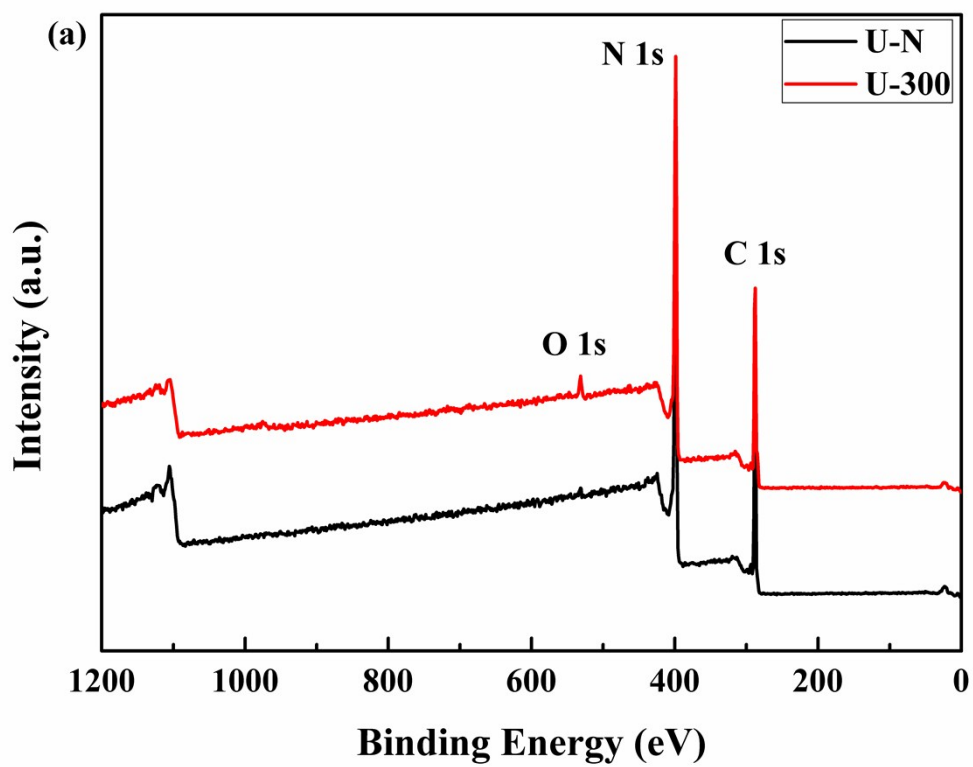


Fig. S2. XPS survey spectrum of different g-C₃N₄ samples.



Fig. S3. Photograph of different $g\text{-C}_3\text{N}_4$ samples.

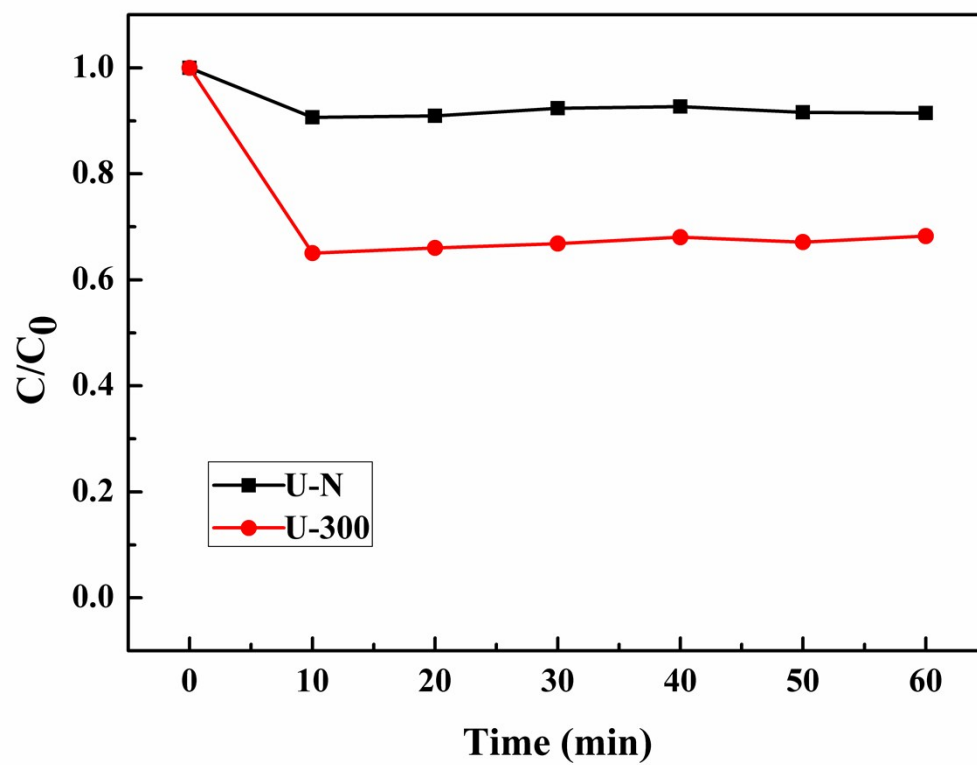


Fig. S4. Adsorption of RhB (10 mg/L, 50 mL) using different $g-C_3N_4$ samples (25 mg) in dark.

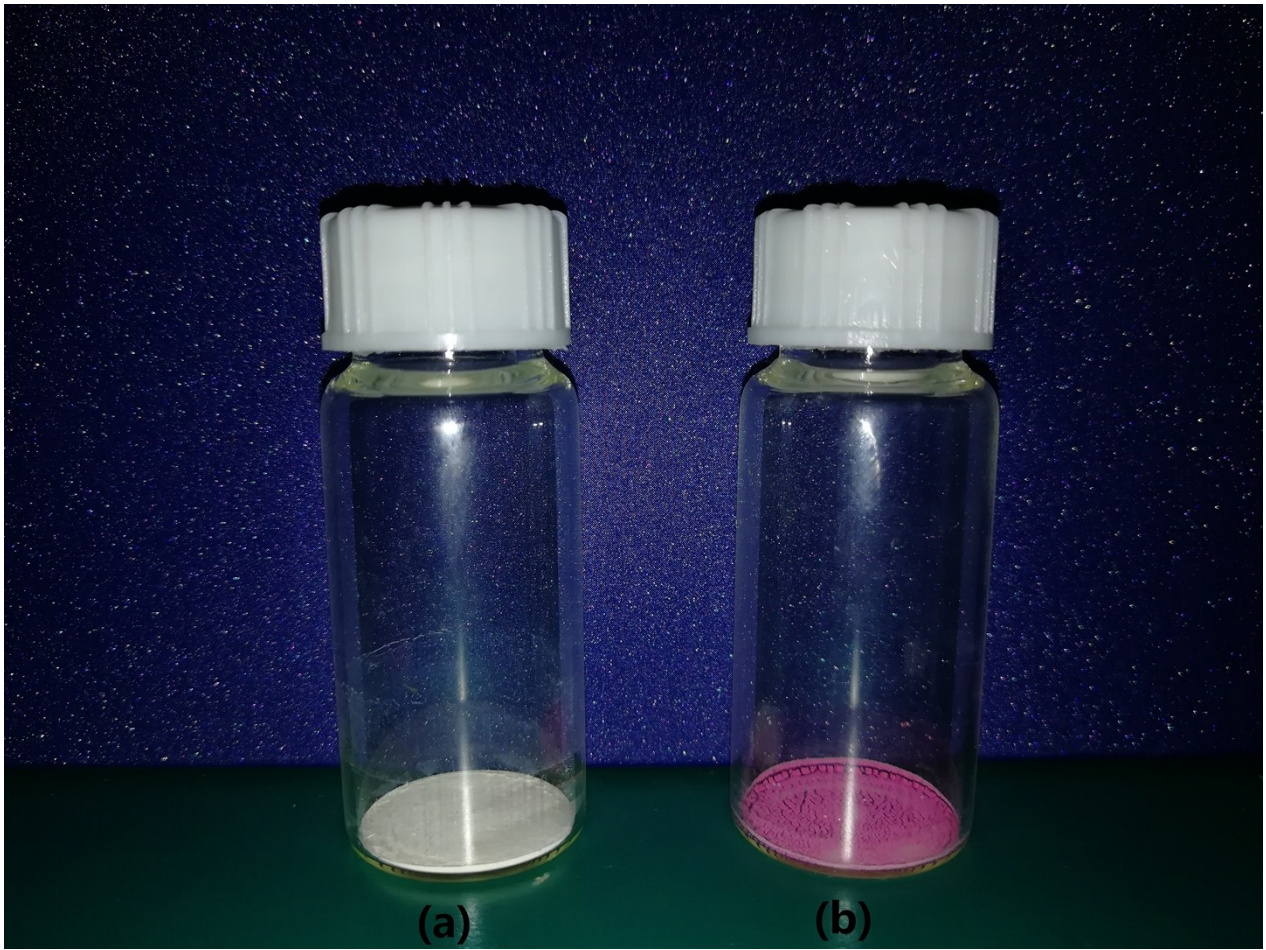


Fig. S5. Photograph of U-N (a) and U-300 (b) after adsorption of RhB.



Fig. S6. Photograph of U-300 after adsorption (a) and degradation (b) of RhB.

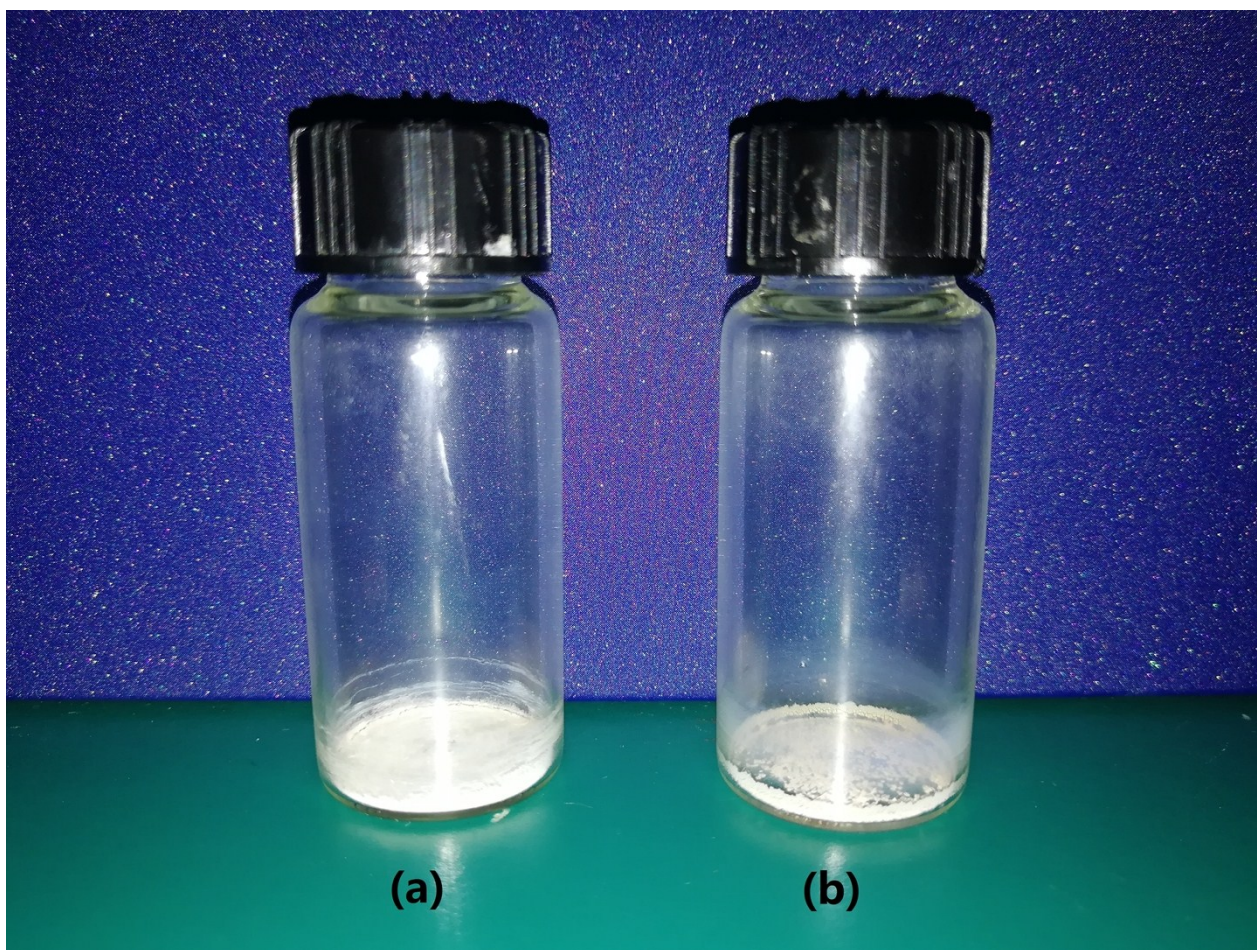


Fig. S7. Photograph of U-N (a) and U-300 (b) after degradation of RhB.

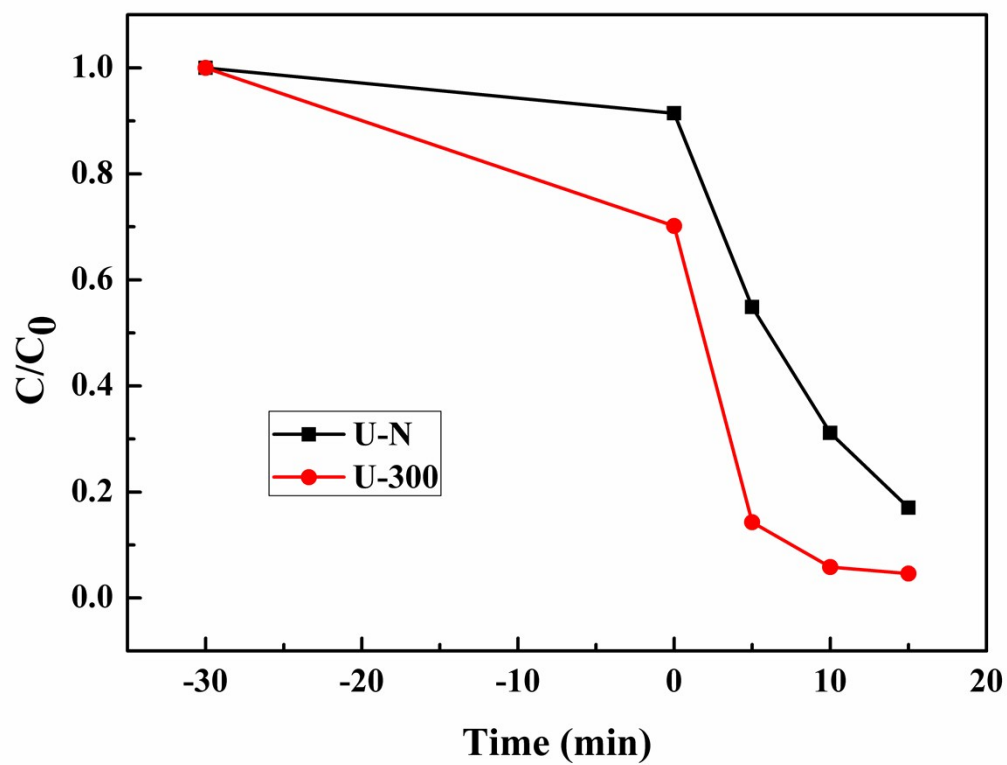


Fig. S8. Adsorption with photocatalytic degradation of RhB (5 mg/L, 50 mL) using different g- C_3N_4 samples (12.5 mg).

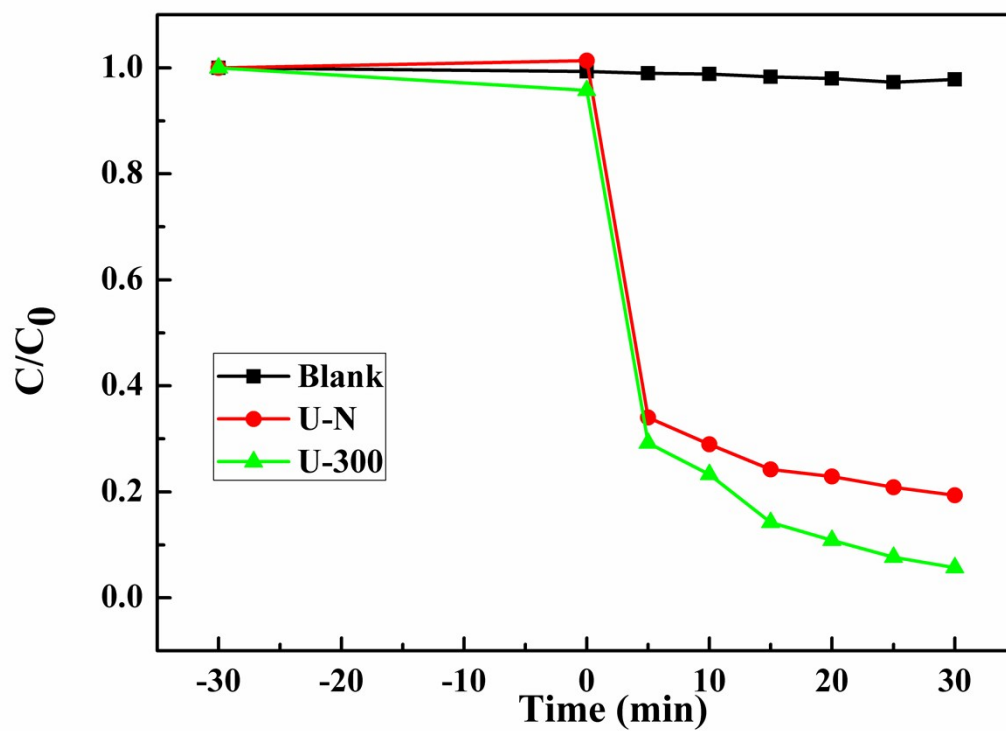


Fig. S9. Photocatalytic degradation of TC-HCl (20 mg/L, 50 mL) using different g-C₃N₄ samples (25 mg).