

## Supporting Information

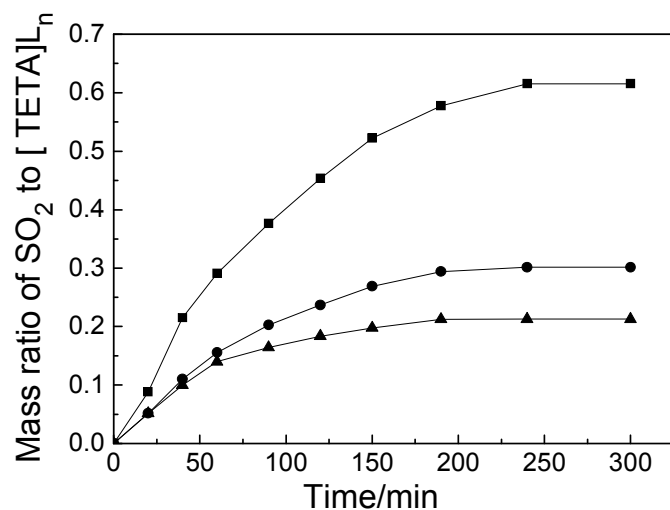
# Highly Efficient and Reversible Absorption of SO<sub>2</sub> by Aqueous Triethylenetetramine Tetralactate Solutions

*Jianguo Qian,<sup>a</sup> Shuhang Ren,<sup>a</sup> Shidong Tian,<sup>a</sup> Yucui Hou,<sup>b</sup> Chenxing Wang<sup>a</sup> and  
Weize Wu<sup>\*,a</sup>*

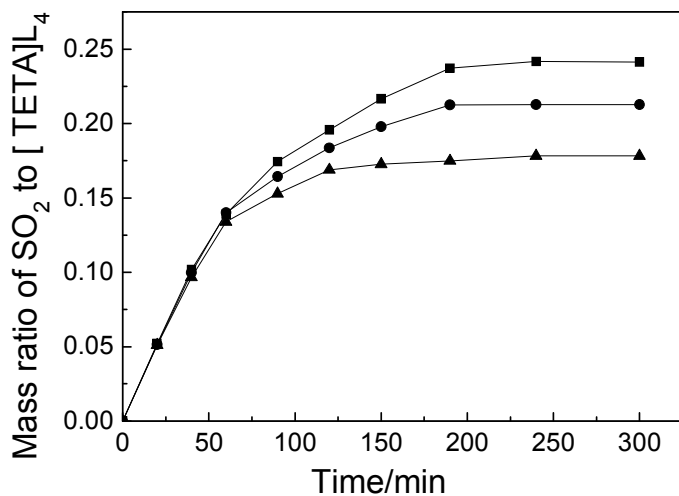
<sup>a</sup>State Key Laboratory of Chemical Resource Engineering, Beijing University of Chemical  
Technology, Beijing 100029, China;

<sup>b</sup>Department of Chemistry, Taiyuan Normal University, Taiyuan 030031, China

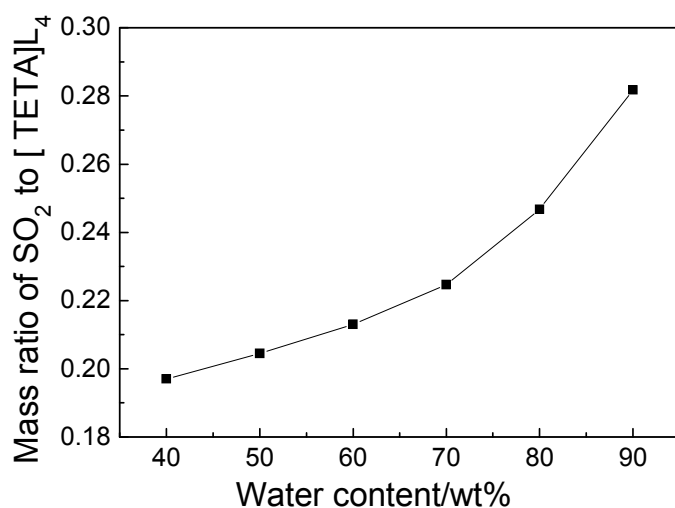
\*Corresponding author; Email: wzwu@mail.buct.edu.cn, Tel./Fax: +86 10 64427603.



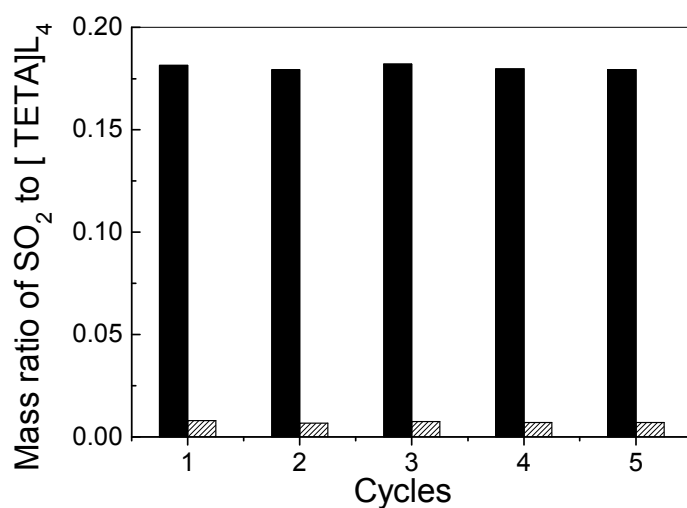
**Figure S1.** The absorption of 3 % SO<sub>2</sub> in nitrogen based on mass ratio by three kinds of aqueous [TETA]L<sub>n</sub> solutions with 50 wt% H<sub>2</sub>O under atmospheric pressure at 50 °C: ■, [TETA]L<sub>2</sub>; ●, [TETA]L<sub>3</sub>; ▲, [TETA]L<sub>4</sub>.



**Figure S2.** The absorption of 3 % SO<sub>2</sub> in nitrogen based on mass ratio by aqueous [TETA]L<sub>4</sub> solution with 50 wt% H<sub>2</sub>O under atmospheric pressure at different temperatures: ■, 40 °C; ●, 50 °C; ▲, 60 °C.



**Figure S3.** The absorption capacity of 3 % SO<sub>2</sub> in nitrogen based on mass ratio by aqueous [TETA]L<sub>4</sub> solution with different water contents at 50 °C under atmospheric pressure.



**Figure S4.** The absorption and desorption of 3 % SO<sub>2</sub> in nitrogen based on mass ratio by aqueous [TETA]L<sub>4</sub> solution with 30 wt% water at 60 °C under atmospheric pressure: ■, absorption; ▨, desorption.