

## Supplementary Information

### Palladium supported on amphiphilic porous organic polymer: a highly efficient catalyst for aminocarbonylation reaction in water

Yizhu Lei<sup>a,\*</sup>, Yali Wan<sup>a</sup>, Guangxing Li<sup>b,\*</sup>, Yanlong Gu<sup>b</sup>, Jing Feng<sup>a</sup>, Renshu Wang<sup>a</sup> and Xiao-Yu Zhou<sup>a</sup>

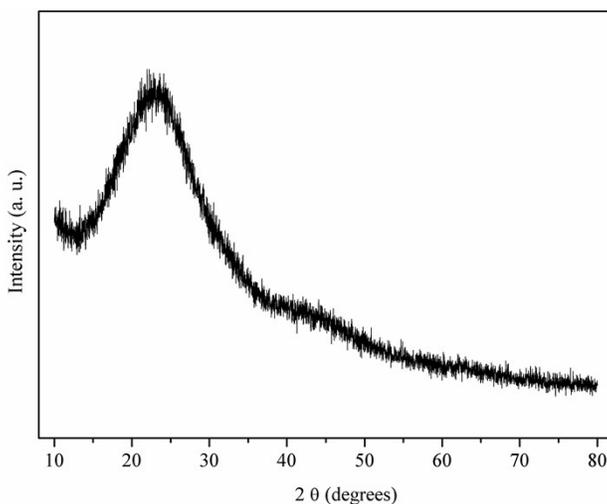
<sup>a</sup>*Department of Chemistry and Chemical Engineering, Liupanshui Normal University, Liupanshui, Guizhou 553004, PR China*

<sup>b</sup>*School of Chemistry and Chemical Engineering, Huazhong University of Science and Technology, Luoyu Road 1037, Wuhan, Hubei 430074, PR China*

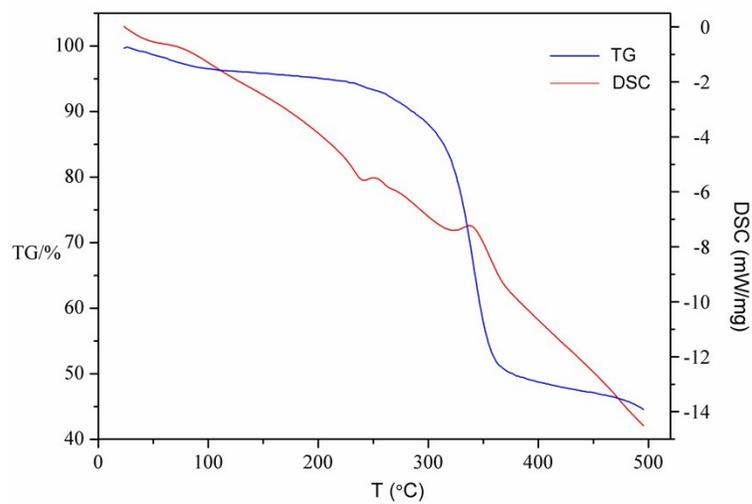
Corresponding author:

E-mail: yzleiabc@126.com (Y. Lei). Tel: +86 858 8600946; Fax: +86 858 8601636.

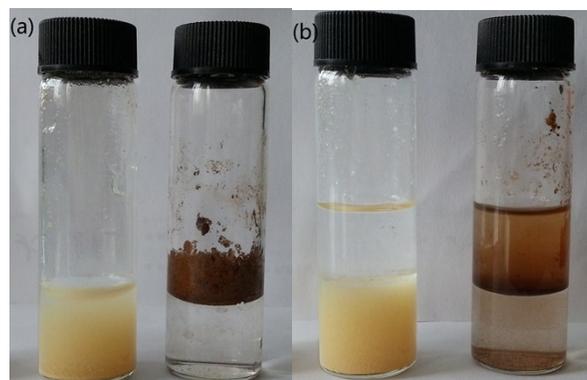
E-mail: ligxabc@163.com (G. Li). Tel: +86 27 87543032; Fax: +86 27 87543632.



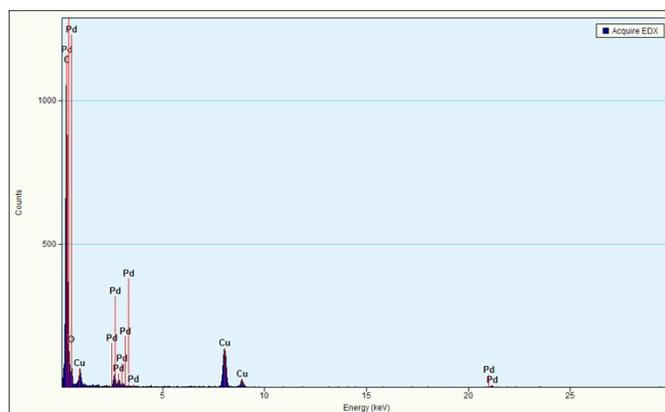
**Fig. S1** XRD pattern of UPOP



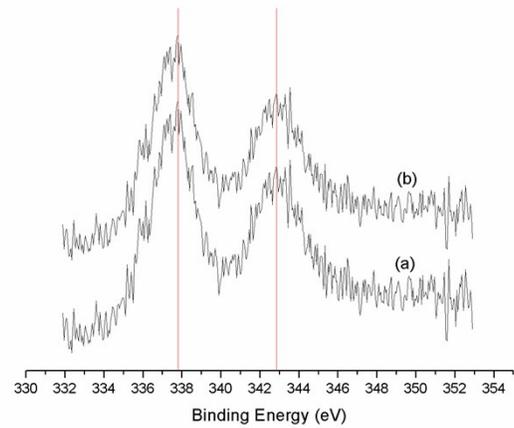
**Fig. S2** TG and DSC curves of UPOP



**Fig. S3** Hydrophilic measurements, (a) in water: UPOP (left), KAPs(Ph-PPh<sub>3</sub>) (right); (b) in water-hexane: UPOP (left), KAPs(Ph-PPh<sub>3</sub>) (right).



**Fig. S4** EDS analysis for Pd@UPOP



**Fig. S5** spectra: (a) fresh Pd@UPOP; (b) Pd@UPOP after 2<sup>nd</sup> recycle