

Supplementary Information

A series of phenyl sulfonate metal coordination polymers as catalysts for one-pot Biginelli reaction under solvent free conditions

Jin-Hua Wang,^a Gui-Mei Tang,^{*a} Yong-Tao Wang,^{*a} Yue-Zhi Cui,^a Jun-Jie Wang,^b and Seik Weng Ng^c

^a Department of Chemical Engineering, Shandong Provincial Key Laboratory of Fine Chemicals, Qilu University of Technology, Jinan, 250353, China

^b Department of Chemistry, Anyang Normal University, Henan, 455002, P. R. China.

^c Department of Chemistry, University of Malaya, Kuala Lumpur, 50603, Malaysia

*Corresponding authors. E-mail: ceswyt@qlu.edu.cn (Y. T. Wang); meiguit@163.com (G. M. Tang)

Fax: int code +86 0531 8963 1207. Tel: +86 0531 8963 1207.

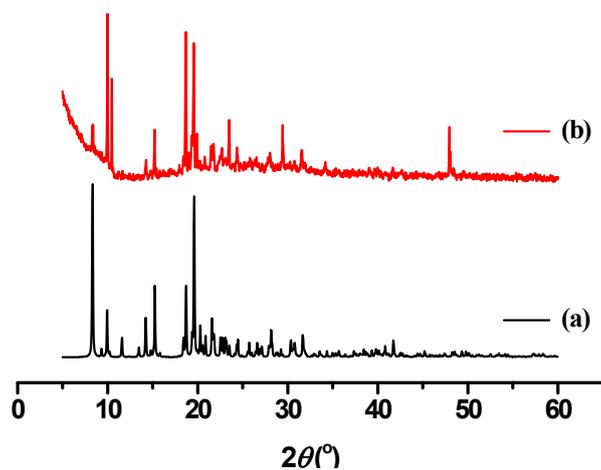


Fig. S1 Powder X-ray diffraction (PXRD) plots for **1**. (a) simulated; (b) experimental.

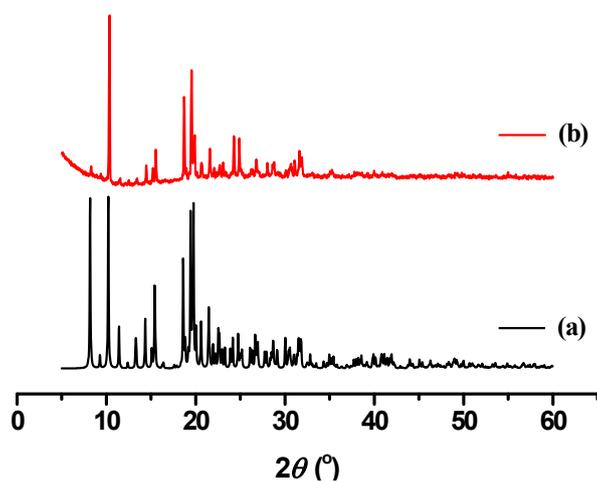


Fig. S2 PXRD plots for **2**. (a) simulated; (b) experimental

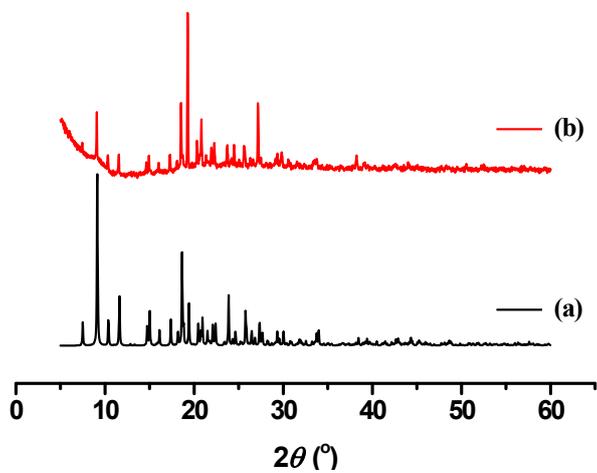


Fig. S3 PXRD plots for **3**. (a) simulated; (b) experimental.

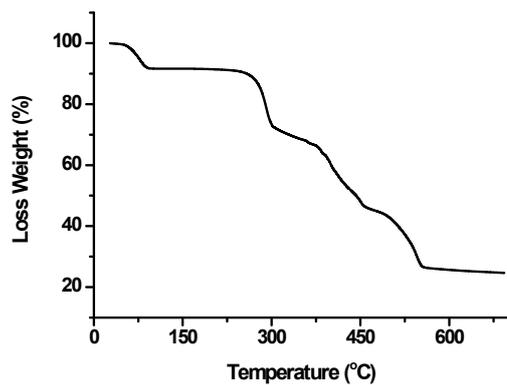


Fig. S4 TGA cure of 1.

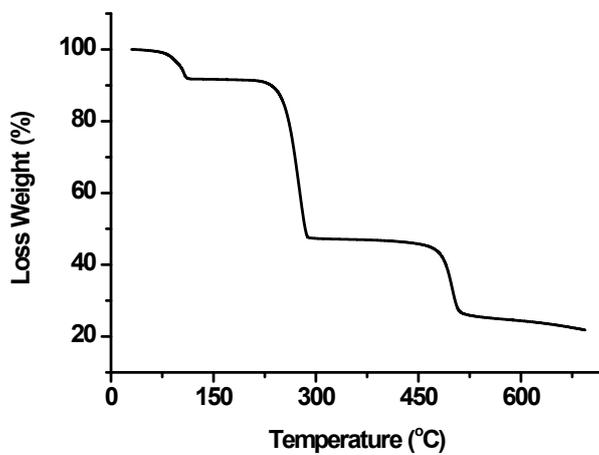


Fig. S5 TGA cure of 2.

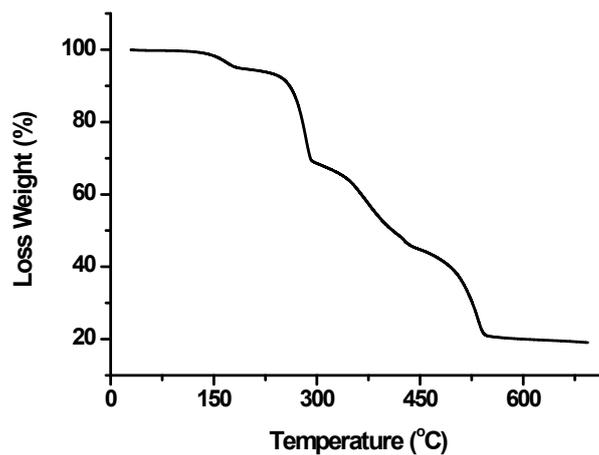
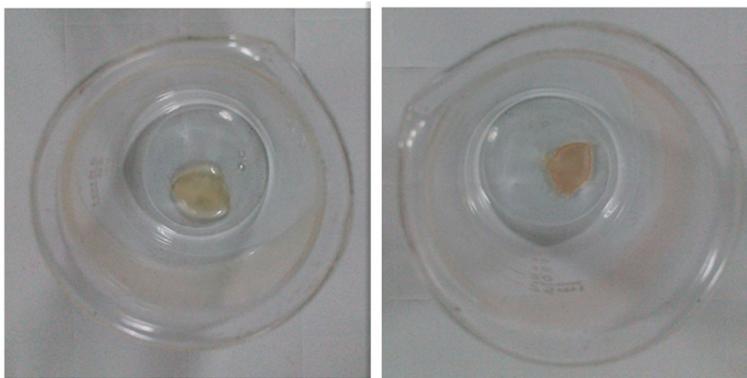
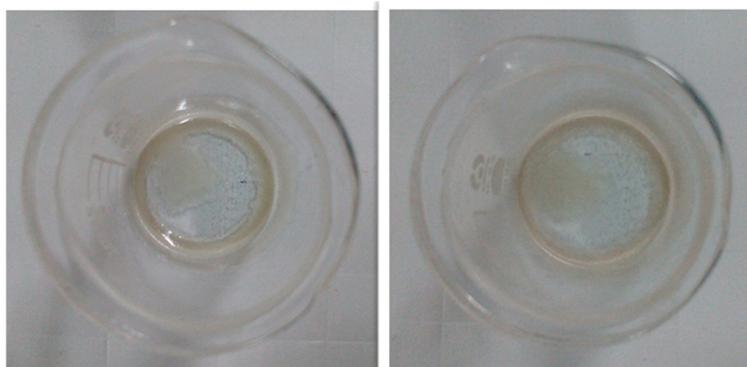


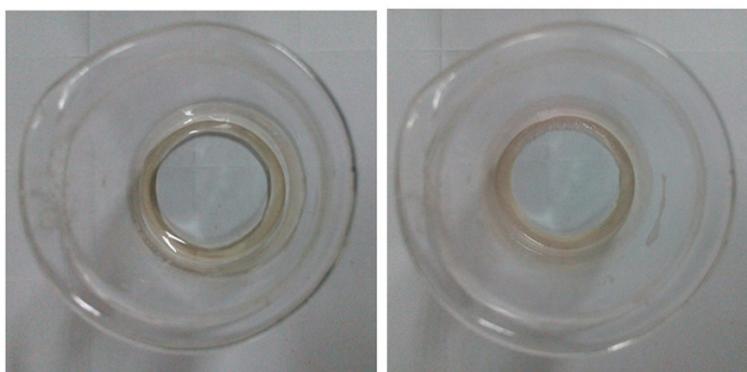
Fig. S6 TGA cure of 3.



(a)



(b)



(c)

Fig. S7 The optic photograph of the filtered solution (left) and the recovery catalyst through the volatilized method (right) for **1-3** in a, b, and c, respectively.



Fig. S8 The optic photograph of the recovery catalyst through the combined method of the overabound amount of the catalyst and the volatilized method (right) for **1**.

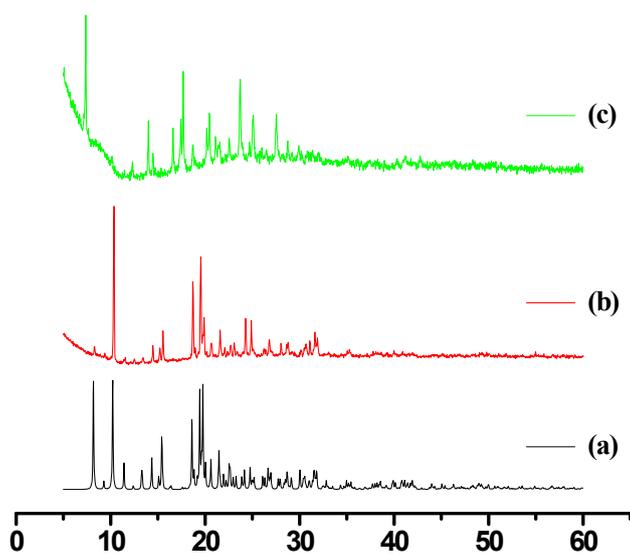


Fig. S9 PXRD of **1**: (a) simulated; (b) as-synthesized; (c) recovered after the catalyzed reaction