

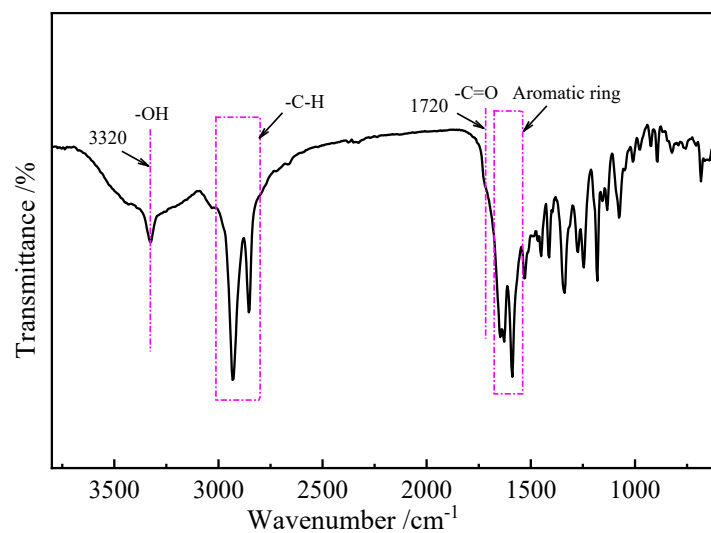
## **Supplementary Materials**

### **Incorporation of rhodamine into a host polymer via in-situ generated isocyanate group and application for the detection of Cu<sup>2+</sup> ion**

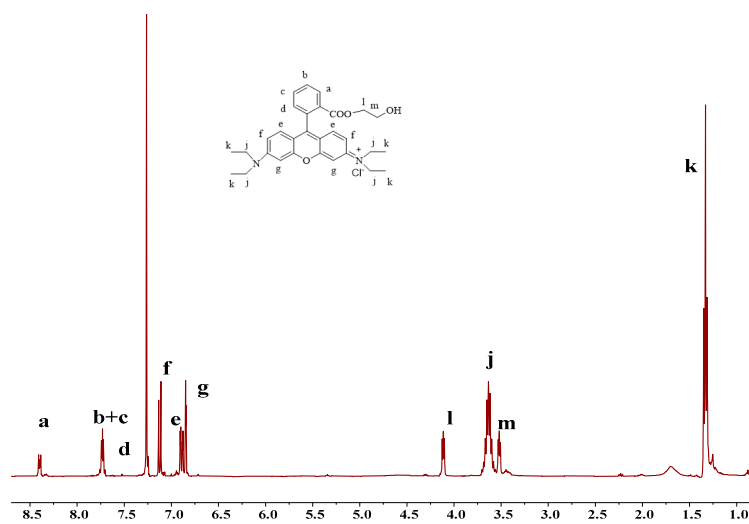
Sai Zhang, Zhe Yao, Wenqiang Qiao\* and Zhi Yuan Wang\*

State Key Laboratory of Fine Chemicals, Department of Polymer Science & Materials, School of Chemical Engineering, Dalian University of Technology, Dalian 116024, P. R. China

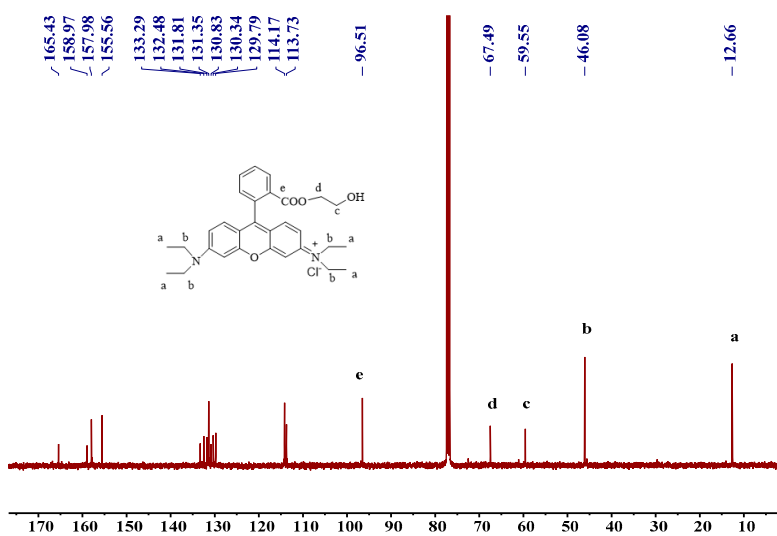
\* Corresponding Authors: wqqiao@dlut.edu.cn; wwjoy@dlut.edu.cn



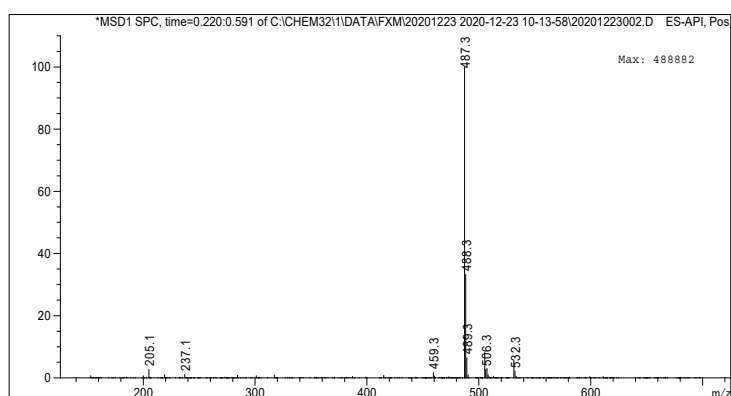
**Figure S1.** IR spectrum of RB-OH



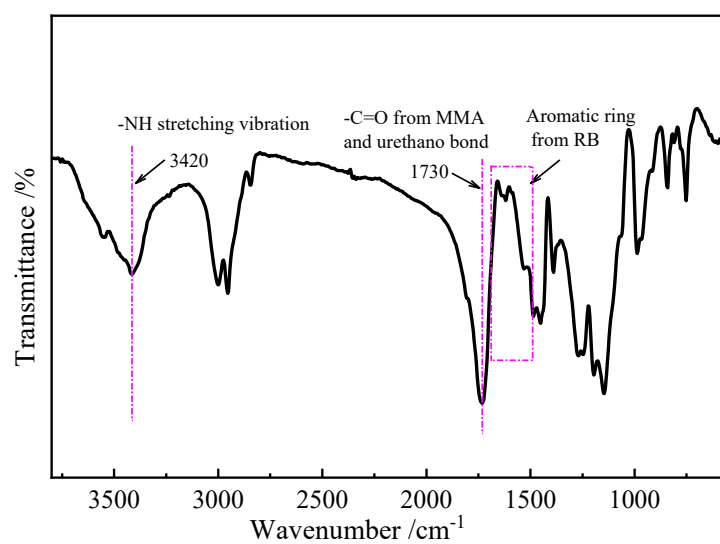
**Figure S2.**  $^1\text{H}$ -NMR spectrum (400 MHz,  $\text{CDCl}_3$ ) of RB-OH



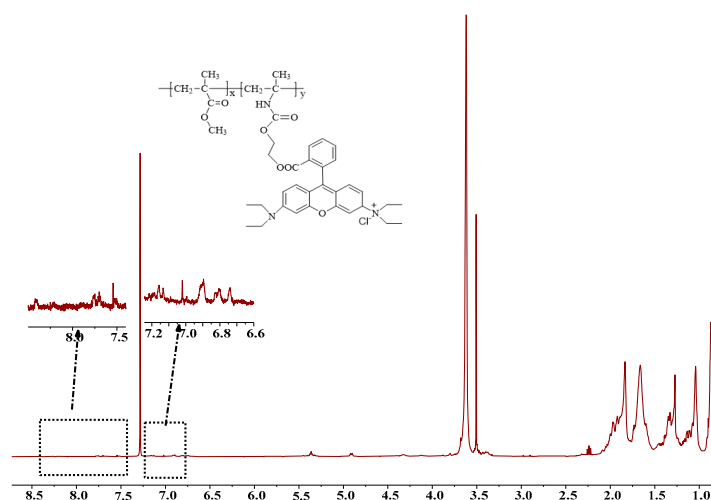
**Figure S3.**  $^{13}\text{C}$ -NMR spectrum (100 MHz,  $\text{CDCl}_3$ ) of RB-OH



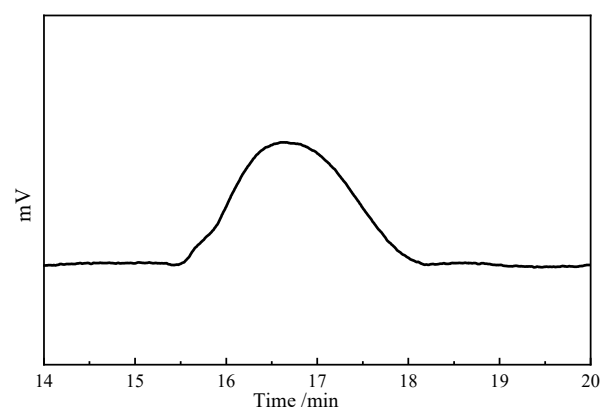
**Figure S4.** Mass spectrum of RB-OH



**Figure S5.** IR spectrum of P(MMA-co-RB)



**Figure S6.** <sup>1</sup>H-NMR spectrum (400 MHz, CDCl<sub>3</sub>) of P(MMA-co-RB)



**Figure S7.** GPC chromatograms of P(MMA-co-RB)