## **Support Information**

## Preparation of sodium lignosulfonate/chitosan adsorbent and application of Pb(II) treatment in water

Pan Jie<sup>1</sup>, Jiangwei Zhu<sup>2</sup> and Fulong Cheng<sup>1,\*</sup>

- Key Laboratory of Water Environment Evolution and Pollution Control in Three Gorges Reservoir, Chongqing Three Gorges University, Chongqing 404100, China
- <sup>2</sup> Co-Innovation Center for Sustainable Forestry in Southern China, Nanjing Forestry University, Nanjing 210037, China

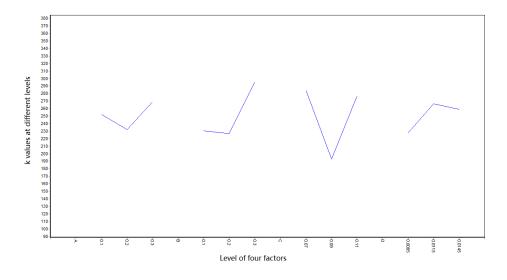


Fig. S1 Sum of the experimental results of the three factors at each level

It is seen from Figure S1 that the value of k at different levels of each factor. A  $(C_{20}H_{24}Na_2O_{10}S_2)$  has three levels: 0.1, 0.2, 0.3. When A=0.3 g, k is the largest, so the best level of A is 0.3. Simultaneously;he best levels of the factors were thus determined as follows: B  $((C_6H_{11}NO_4)_n) = 0.3 \text{ g}, C(K_2S_2O_8) = 0.07 \text{ g}, \text{ and } D(NMBA) = 0.0115 \text{ g}.$ 

Using the best combination to synthesize LC / CS, 0.01 g LC/CS adsorbed 100 mg L<sup>-1</sup> Pb<sup>2+</sup> at pH = 7.0, T = 20 °C, repeated three times to get the data in table S1, and the average value of the three times was 345 mg g<sup>-1</sup>.

| Number     | 1   | 2   | 3   |
|------------|-----|-----|-----|
| Q (mg g-1) | 338 | 349 | 347 |

Table S1 Adsorption capacity of LC / Cs for Pb2+

| Average value (mg g-1) | 344.67 |
|------------------------|--------|
|                        |        |

ſ