

## Supplementary Material

# Novel chromotropic dyes with surface activity and a regulable color transition point derived from phenolsulfonphthalein

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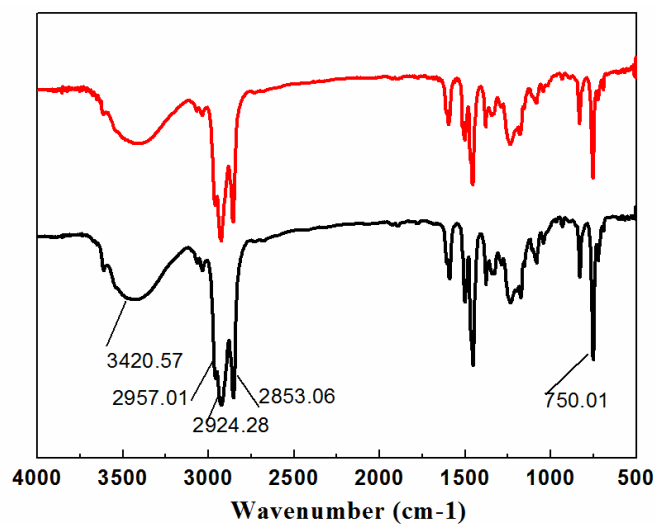


Figure s-1. The IR spectra of **3a** and **3b** (**3a** in black color and **3b** in red color).

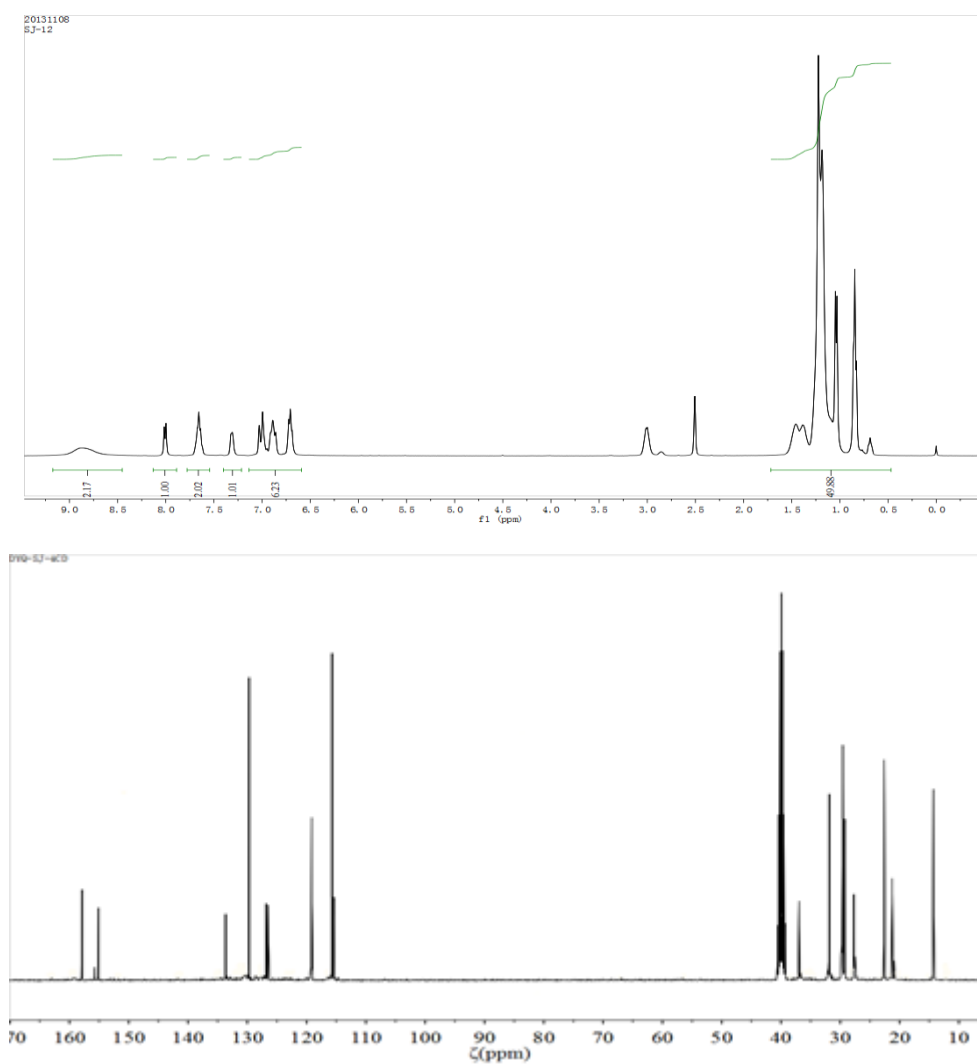


Figure s-2. The <sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of **3a**.

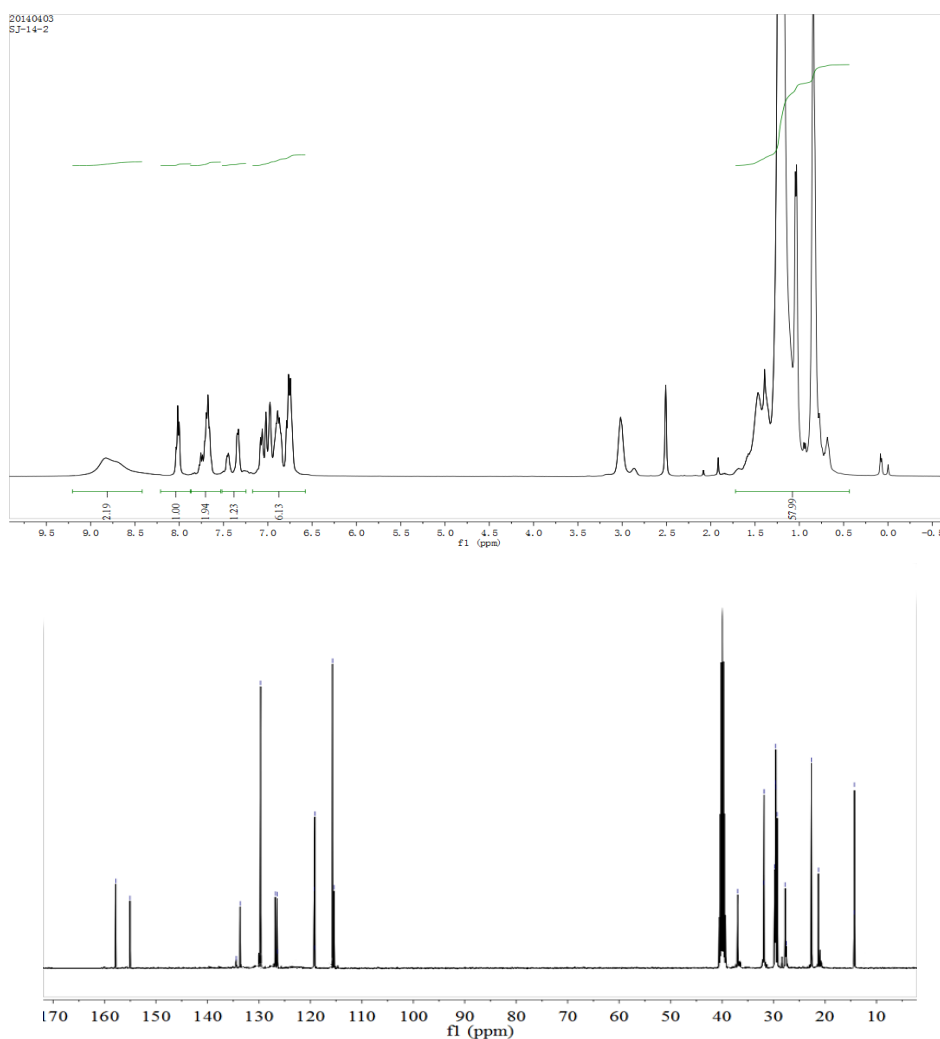


Figure s-3. The  $^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of **3b**.

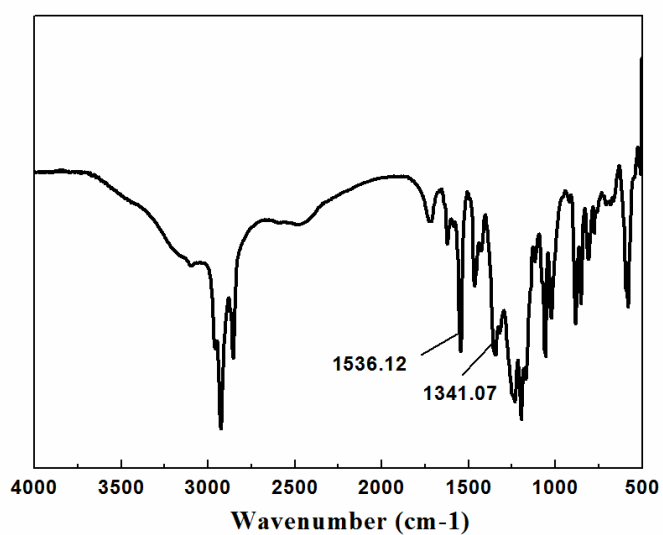
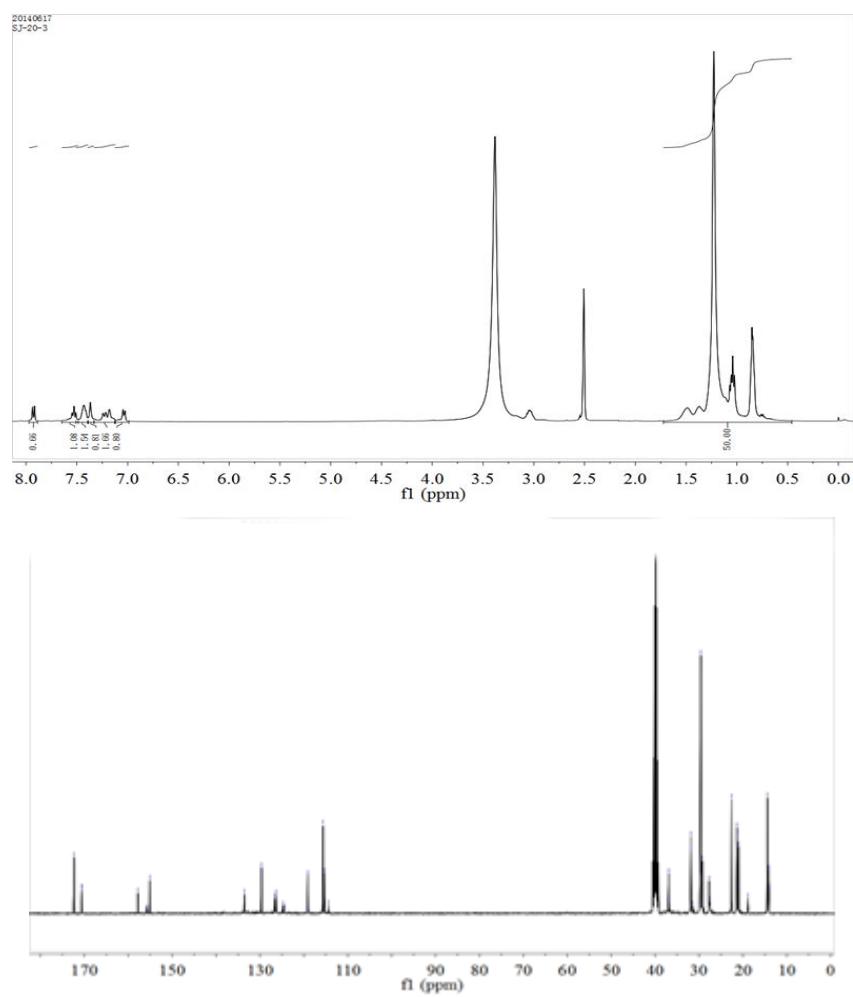


Figure s-4. The IR spectra of **3c**.



**Figure s-5.** The <sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of **3c**.