

## Supporting information for

# Enantioselective Fluorescent Recognition of Mandelic Acid by Unsymmetrical Salalen and Salen Sensors

Xia Yang,<sup>a</sup> Xuechao Liu,<sup>a</sup> Kang Shen,<sup>a</sup> Yong Fu,<sup>a</sup> Ming Zhang,<sup>a</sup> Chengjian Zhu,<sup>\*,a,c</sup> and Yixiang Cheng,<sup>\*,b</sup>

<sup>a</sup> State Key Laboratory of Coordination Chemistry, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210093, China,

<sup>b</sup> Key Laboratory of Mesoscopic Chemistry of MOE, School of Chemistry and Chemical Engineering, Nanjing University, Nanjing 210093, China

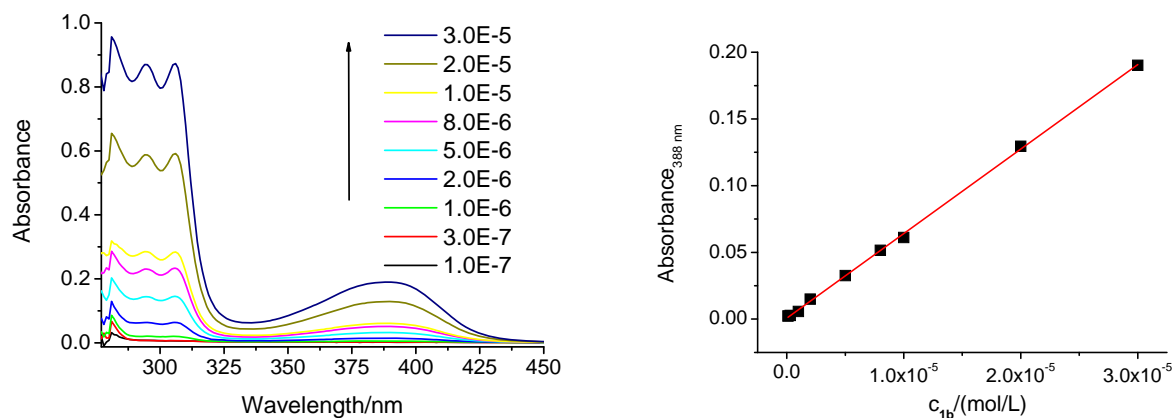
<sup>c</sup> State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, China,

Email: Cheng-Jian Zhu (cjzhu@nju.edu.cn); Yi-Xiang Cheng (yxcheng@nju.edu.cn)

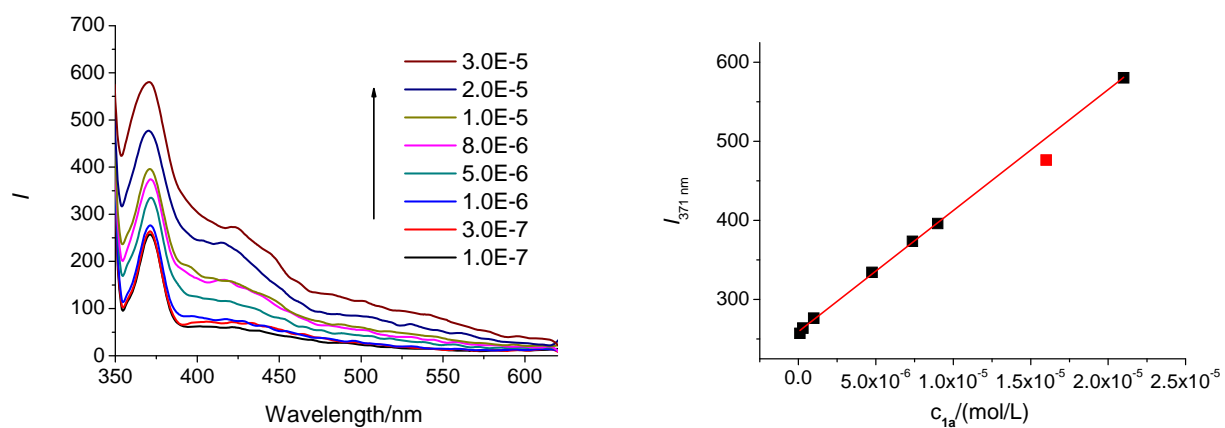
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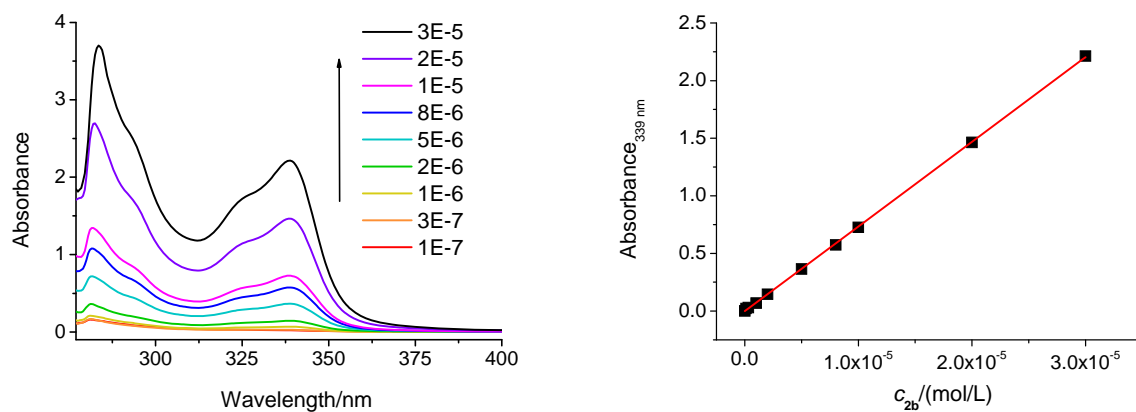
**Fig. S1** Concentration effect on the UV-Vis spectra of **1b** in toluene



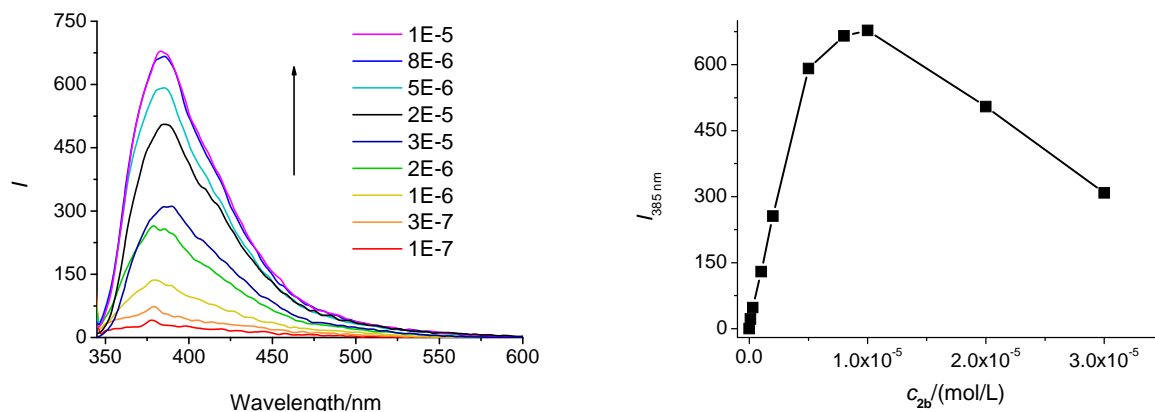
**Fig. S2** Concentration effect on the fluorescence spectra of **1a** in toluene ( $\lambda_{\text{ex}} = 331$  nm)



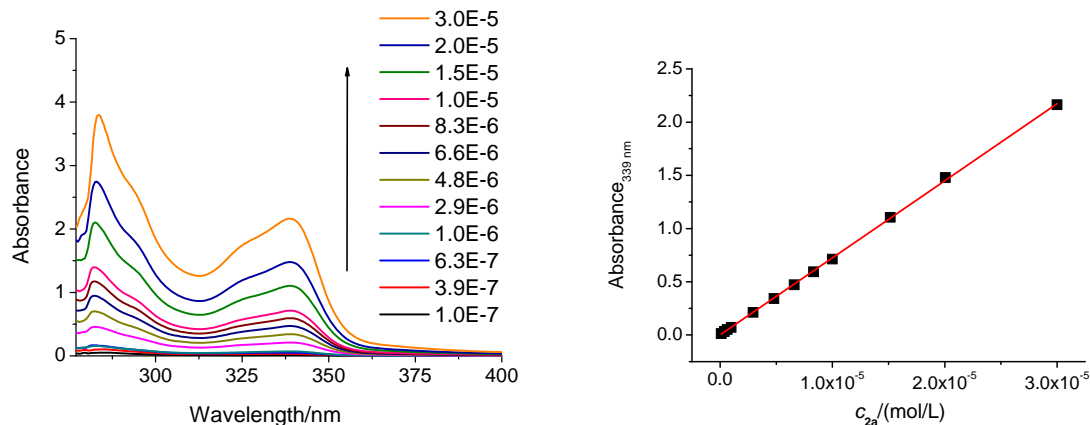
**Fig. S3** Concentration effect on the UV-Vis spectra of **2b** in toluene



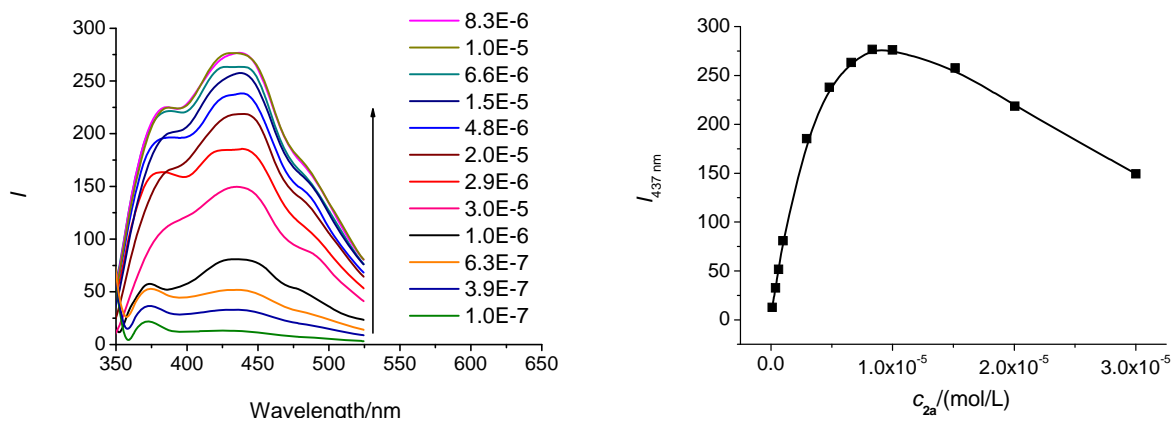
**Fig. S4** Concentration effect on the fluorescence spectra of **2b** in toluene ( $\lambda_{\text{ex}}=331$  nm)



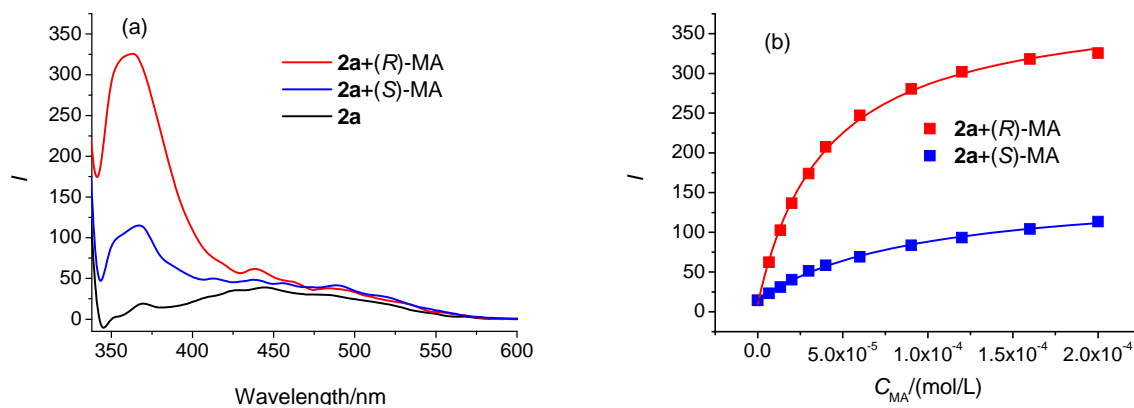
**Fig. S5** Concentration effect on the UV-Vis spectra of **2a** in toluene



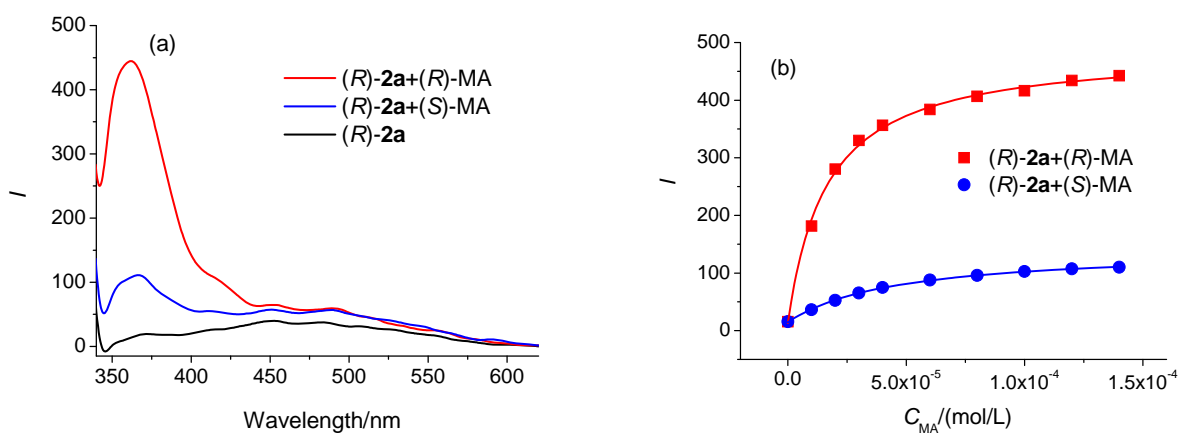
**Fig. S6** Concentration effect on the fluorescence spectra of **2a** in toluene ( $\lambda_{\text{ex}}=331$  nm)



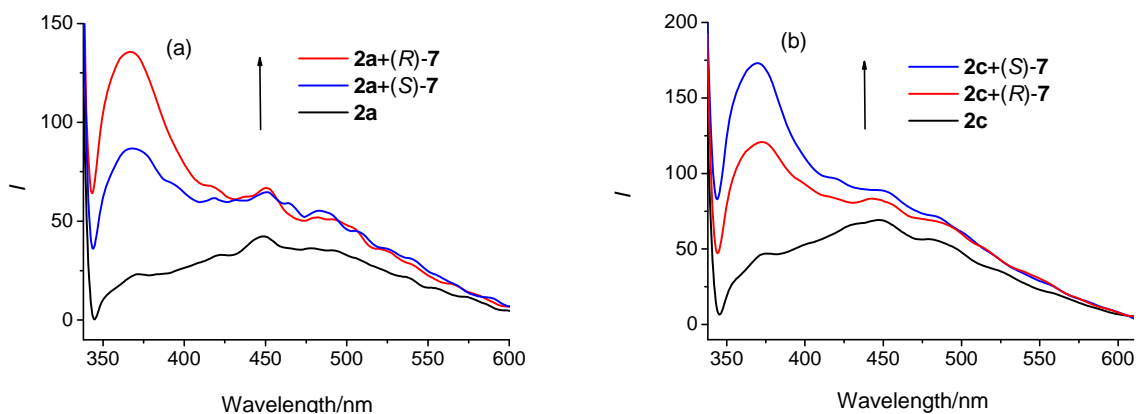
**Fig. S9** (a) Fluorescence spectra of **2a** ( $1 \times 10^{-6}$  mol/L in toluene with 2% (*V/V*) methanol,  $\lambda_{\text{ex}} = 331$  nm) with (*S*)-MA or (*R*)-MA ( $2 \times 10^{-4}$  mol/L) and (b) the plots of ( $I/I_0$ ) vs the concentration of MA during the titration of **2a** with (*S*)-MA or (*R*)-MA ( $\lambda_{\text{ex}} = 331$  nm,  $\lambda_{\text{em}} = 364$  nm)



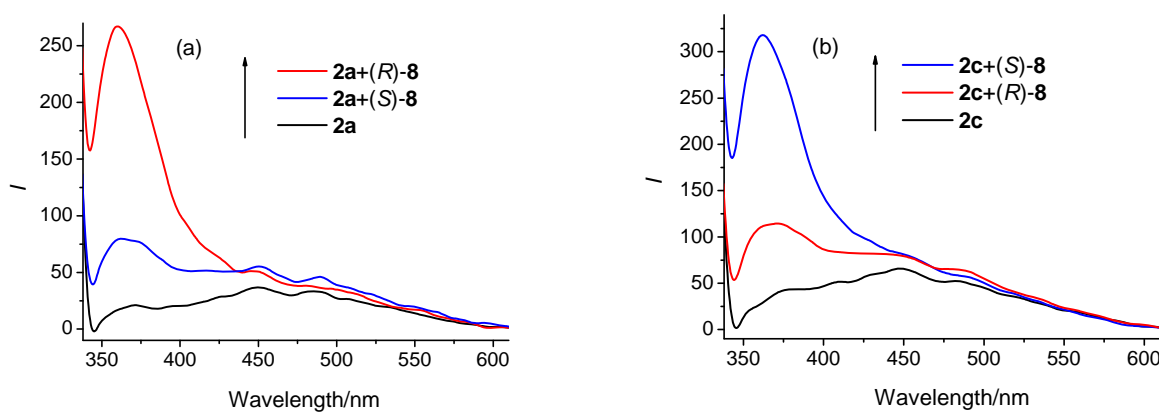
**Fig. S10** (a) Fluorescence spectra of **2a** ( $1 \times 10^{-6}$  mol/L in chloroform with 1% (*V/V*) methanol,  $\lambda_{\text{ex}} = 331$  nm) with (*S*)-MA or (*R*)-MA ( $1.4 \times 10^{-4}$  mol/L) and (b) the plots of ( $I/I_0$ ) vs the concentration of MA during the titration of **2a** with (*S*)-MA or (*R*)-MA ( $\lambda_{\text{ex}} = 331$  nm,  $\lambda_{\text{em}} = 364$  nm)



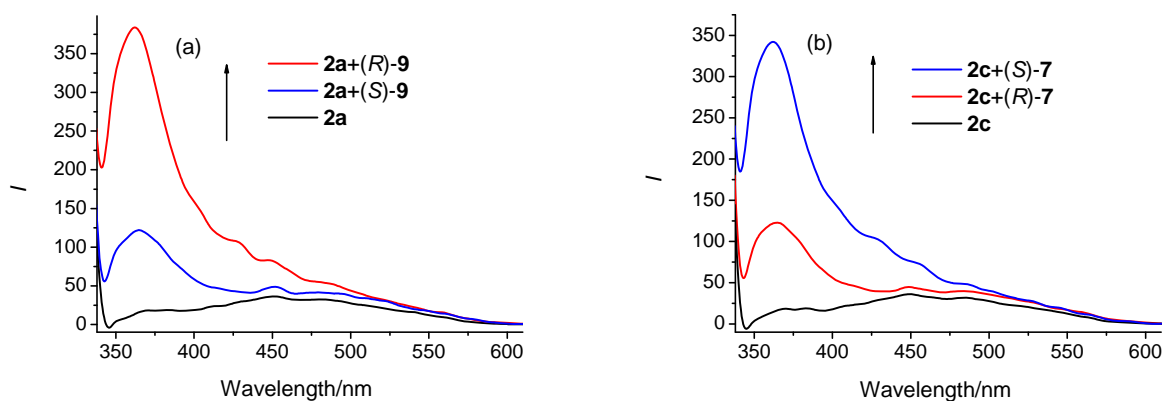
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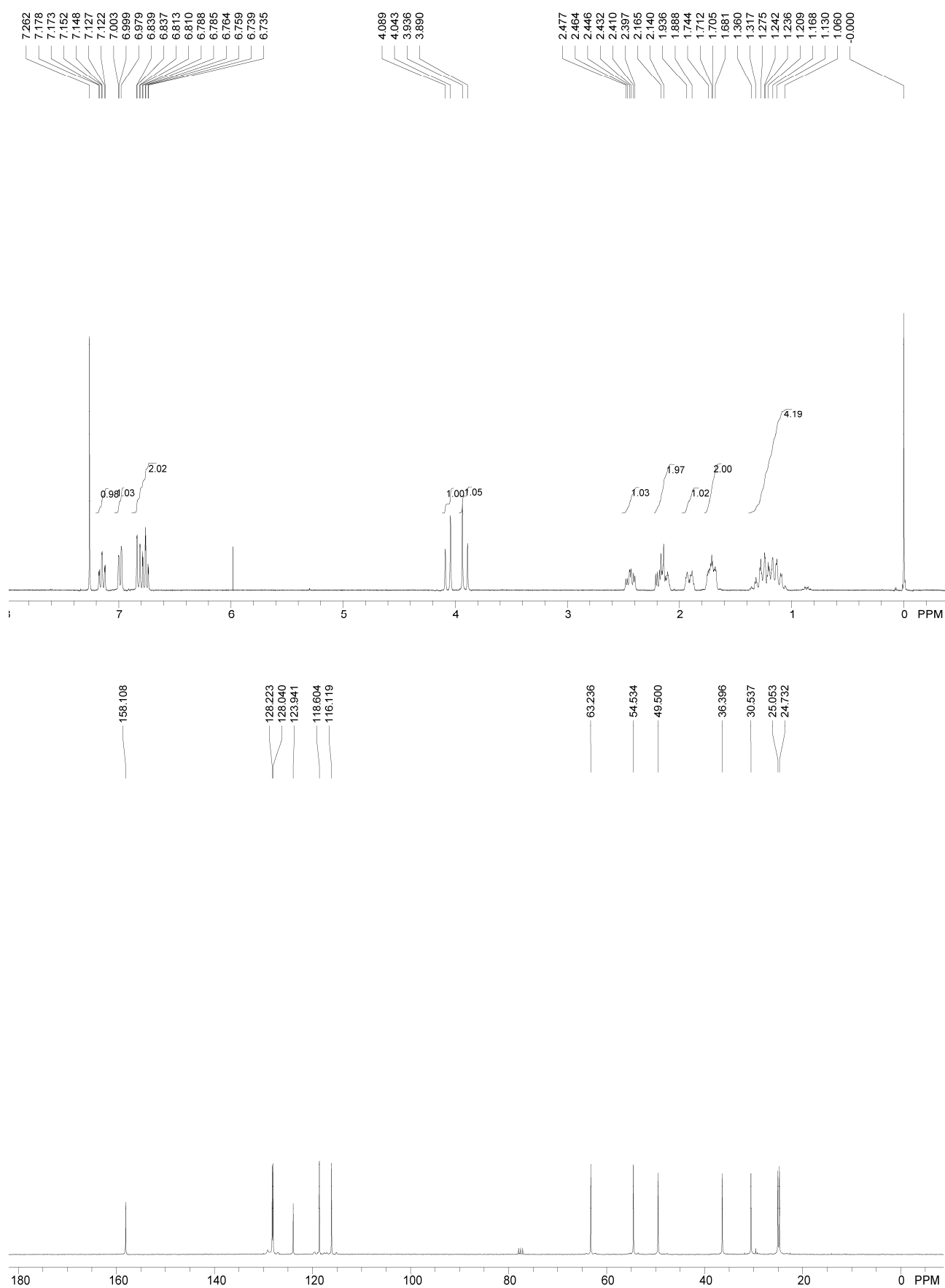
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**Fig. S13** Fluorescence spectra of (a) **2a** and **2c** ( $1 \times 10^{-6}$  mol/L in chloroform with 1% (V/V) methanol,  $\lambda_{\text{ex}} = 331$  nm) with (*S*)-**9** or (*R*)-**9** ( $1.0 \times 10^{-4}$  mol/L)



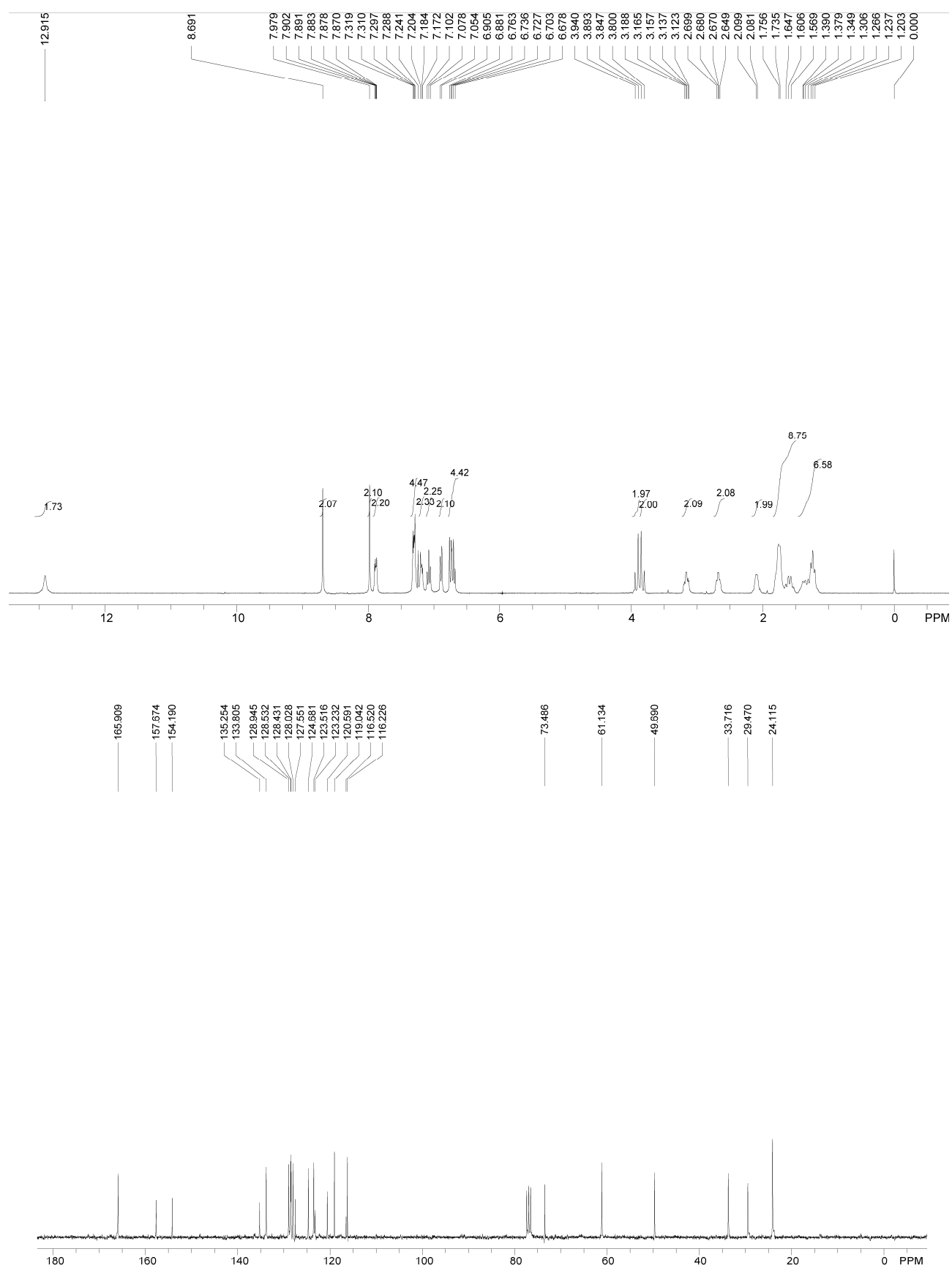
**Fig. S14**  $^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of **4a**



**Fig. S15**  $^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of **4b**

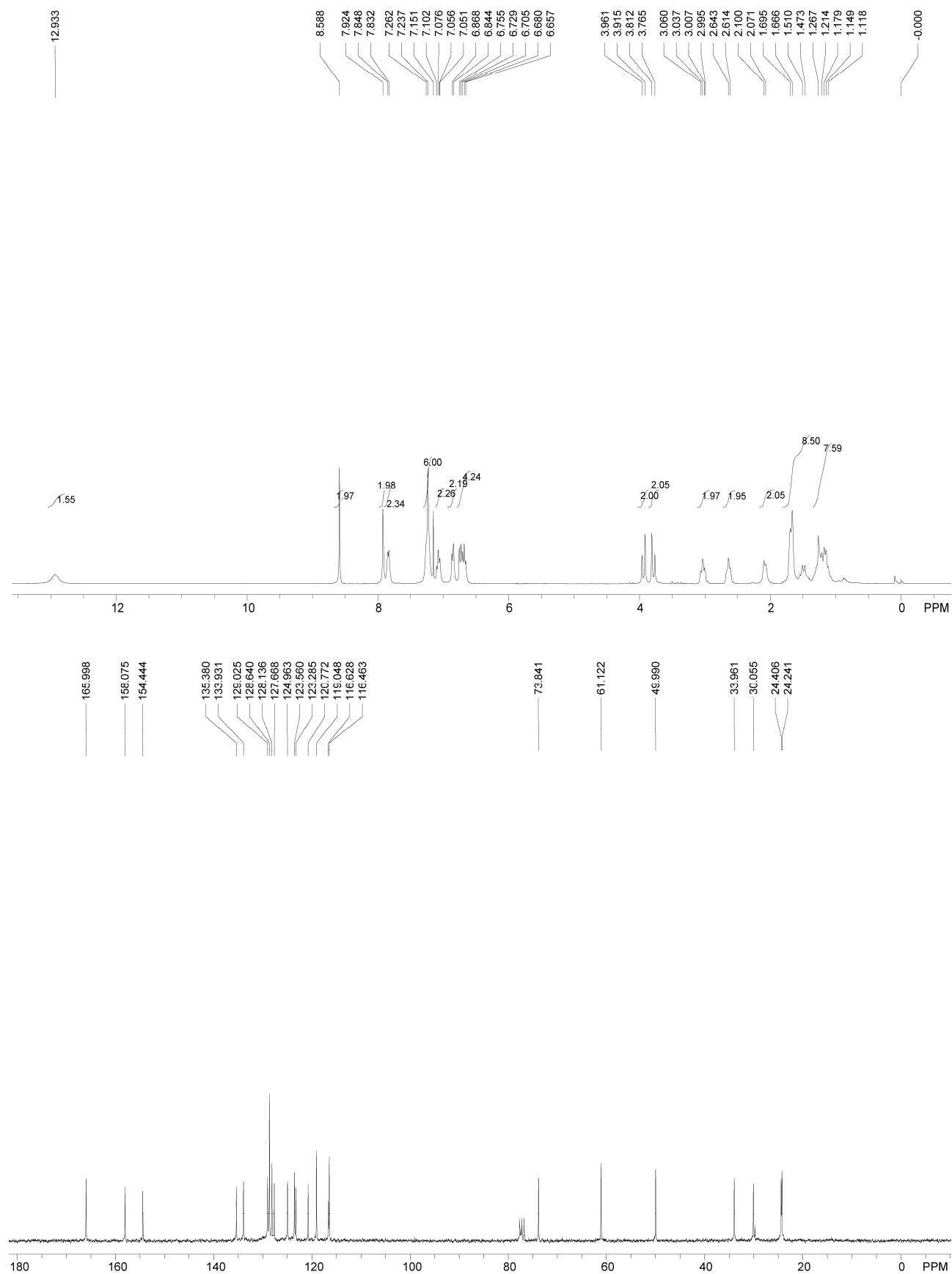


**Fig. S16**  $^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of **1b**

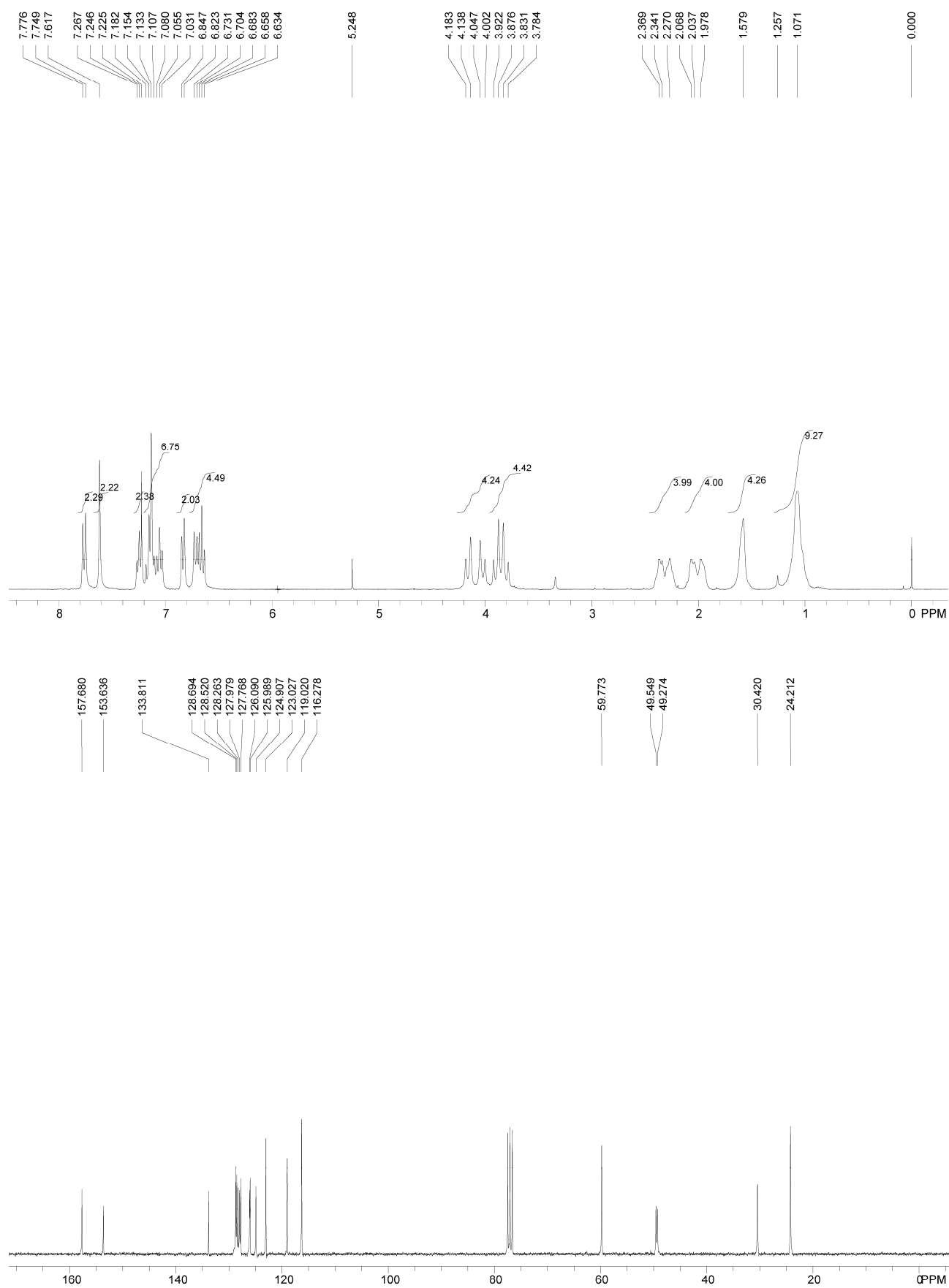




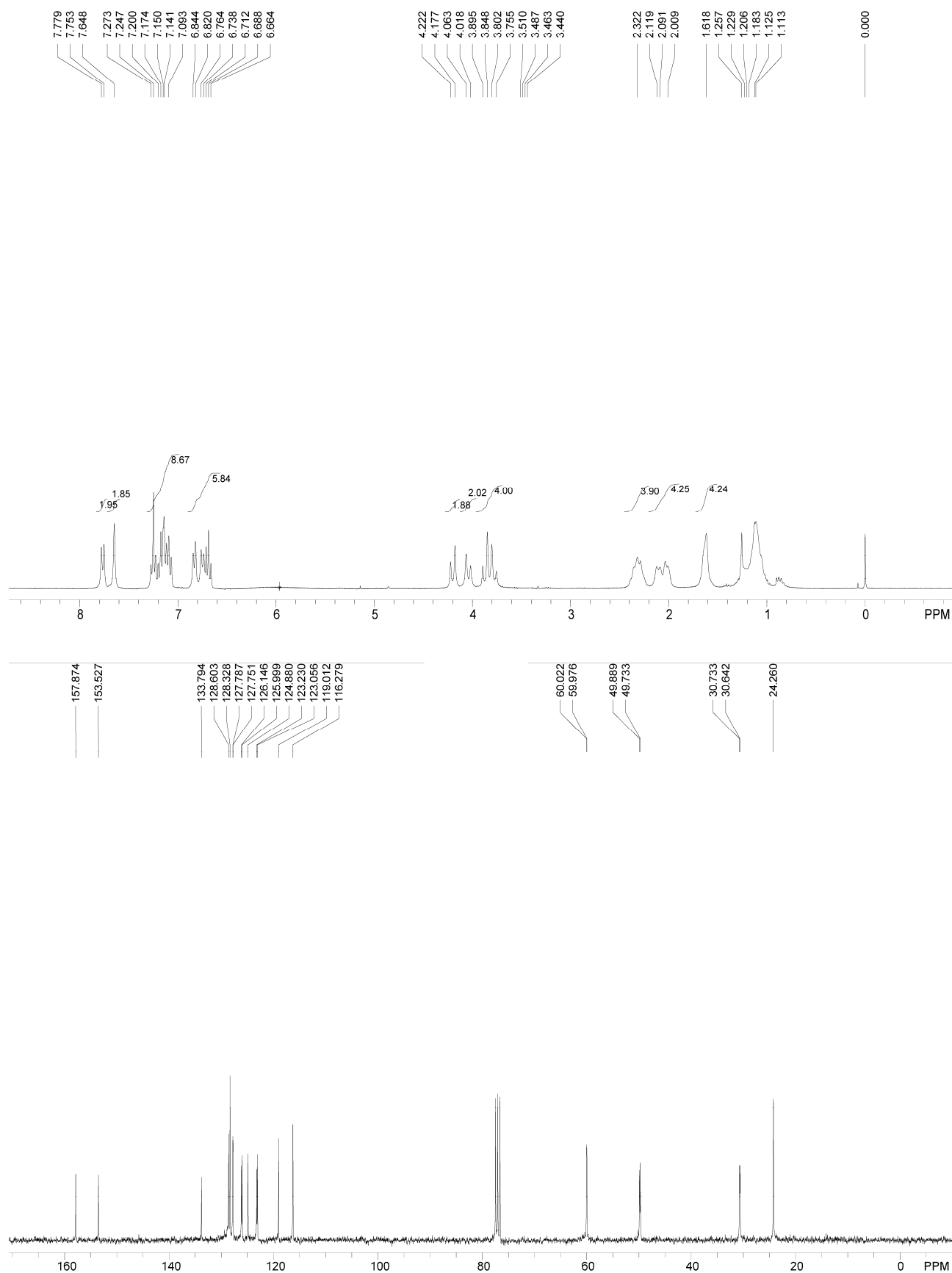
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**Fig. S18**  $^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of **2b**



**Fig. S19**  $^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of **2a**



**Fig. S20**  $^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of **2c**

