

## Supporting Information

### **Nitroaromatic fluorescent sensor from a novel tripyrenyl truxene**

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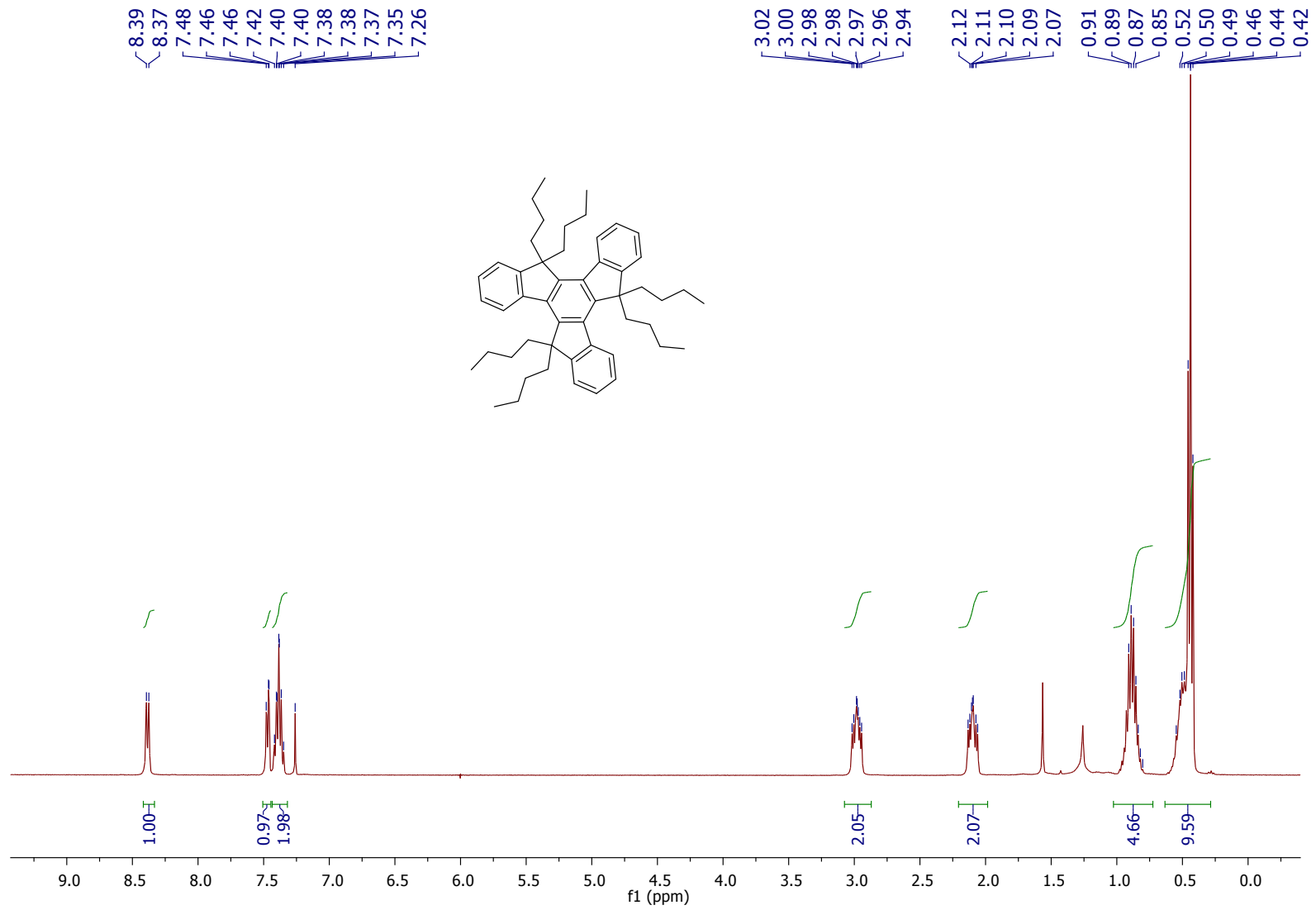
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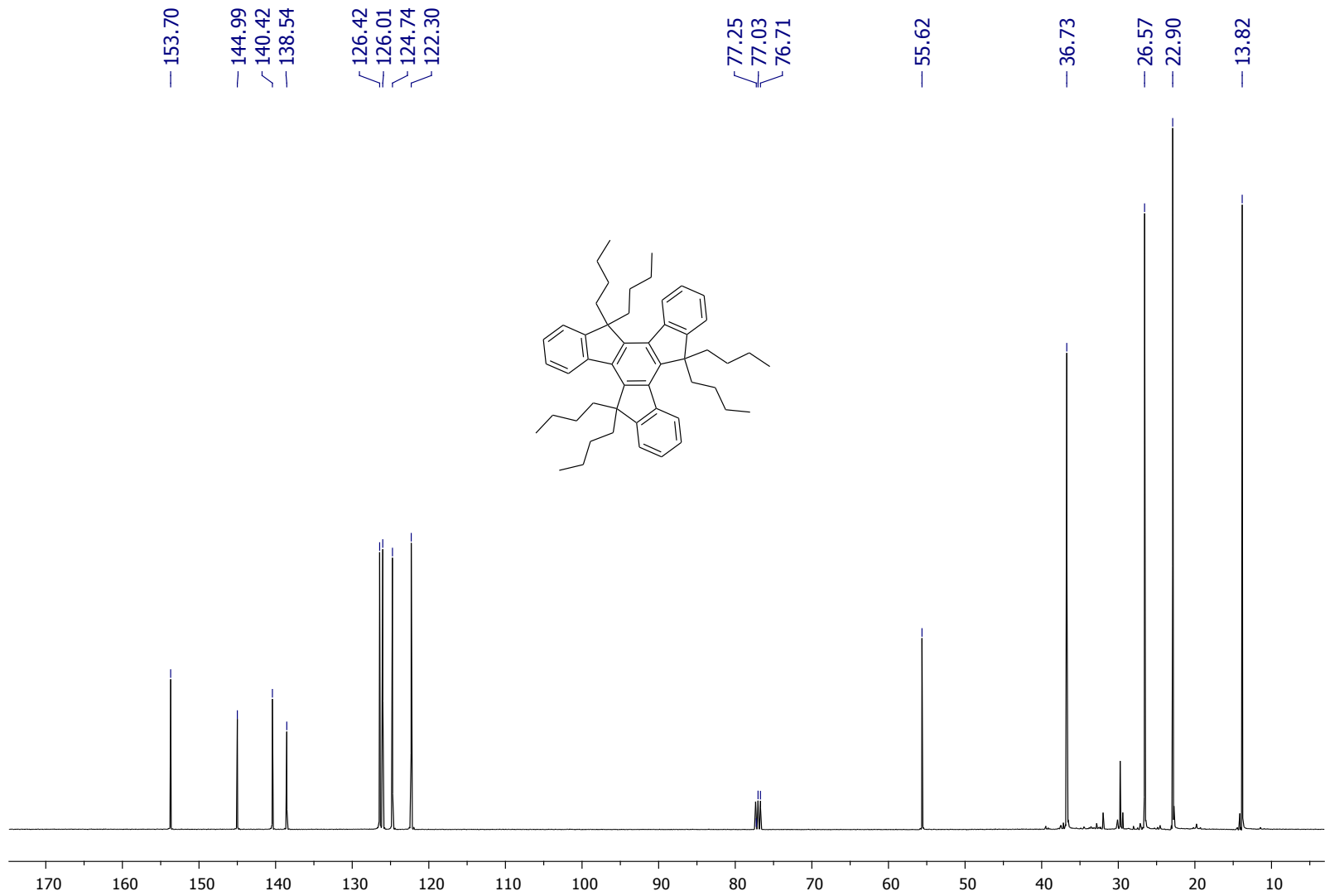
E-mail: paitoon.r@chula.ac.th

Tel.: +66 (2) 2187620

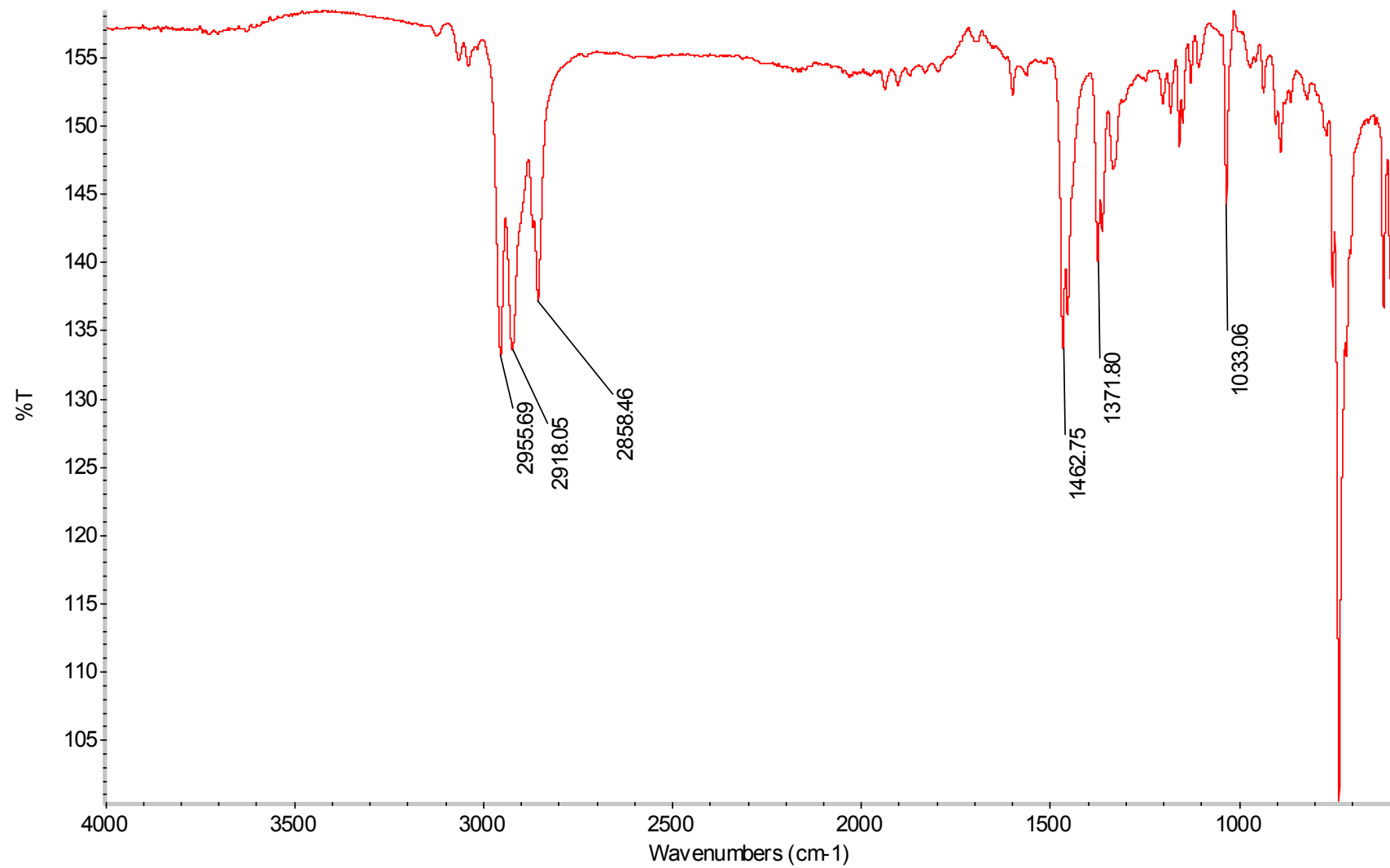
Fax.: +66 (2) 2187598



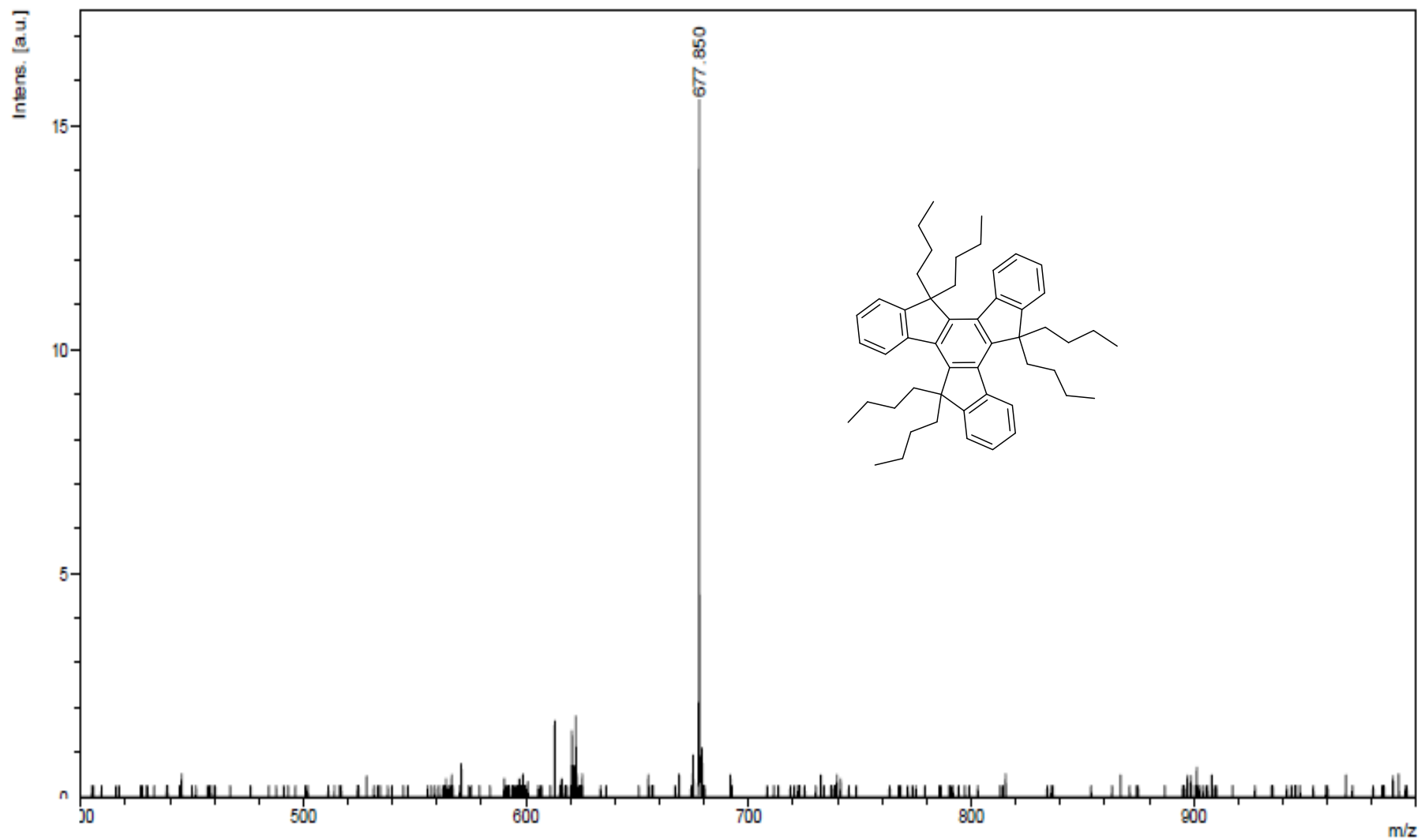
**Figure S1** <sup>1</sup>H-NMR spectrum of **2**



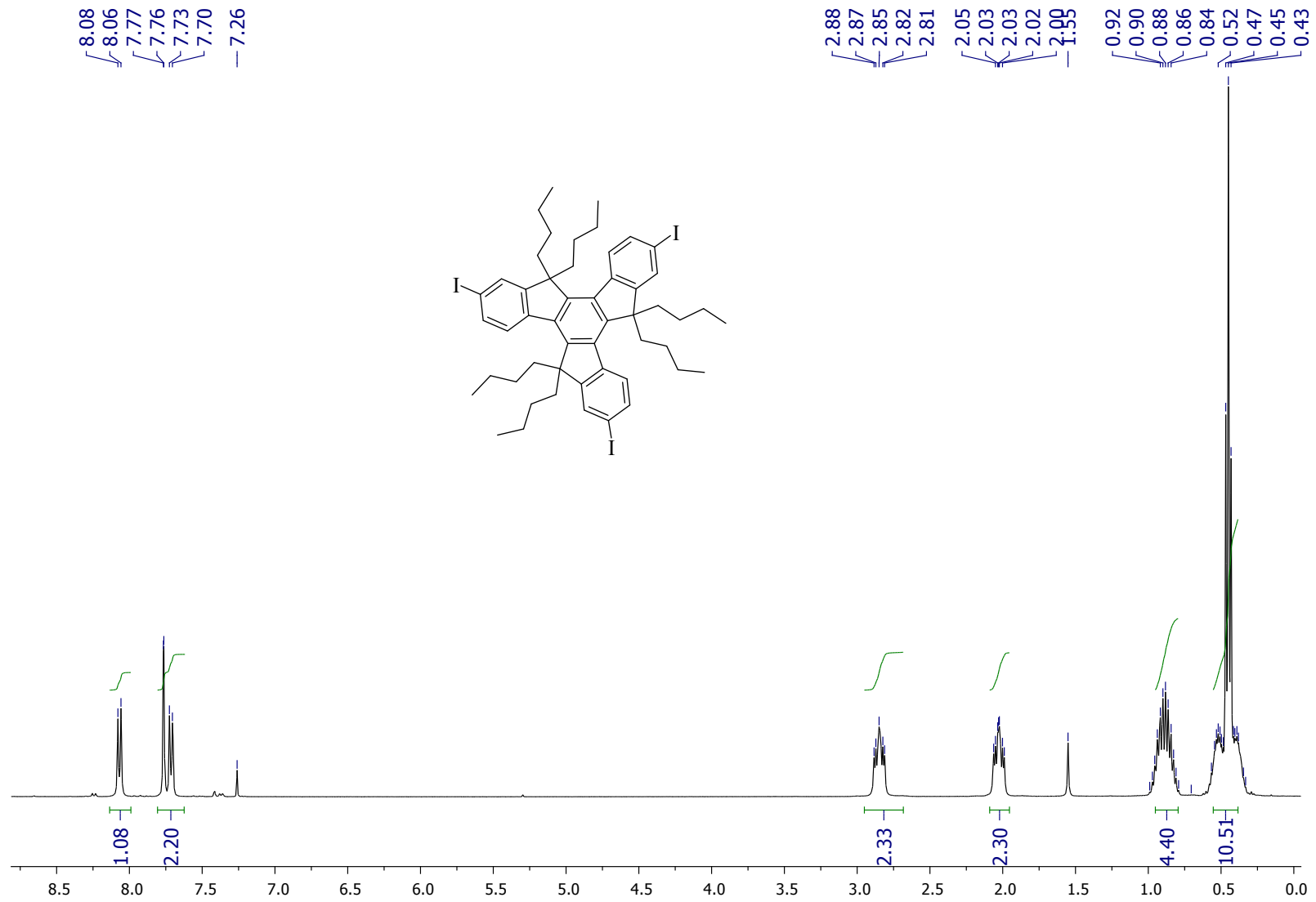
**Figure S2**  $^{13}\text{C}$ -NMR spectrum of **2**



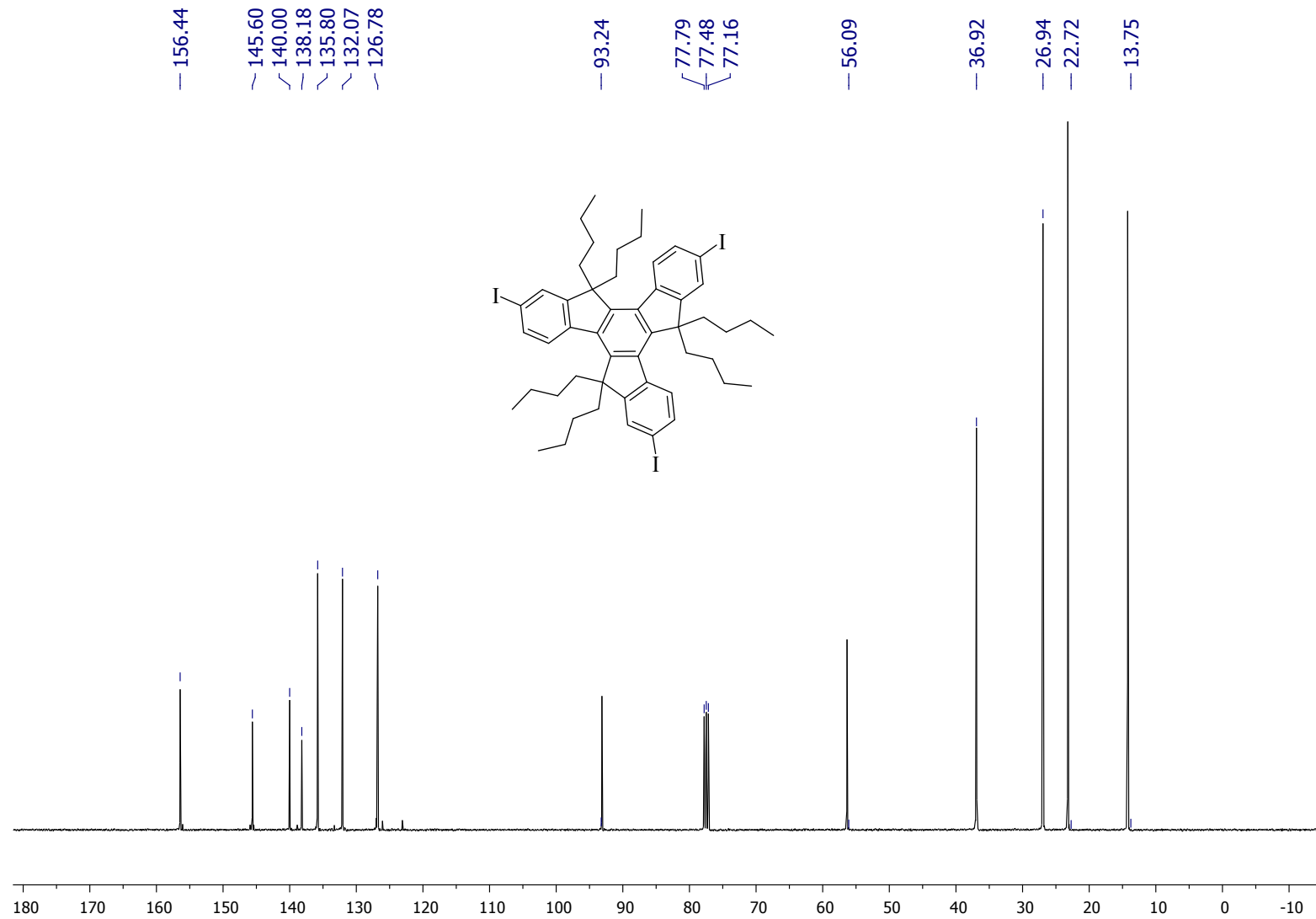
**Figure S3** IR spectrum of **2**



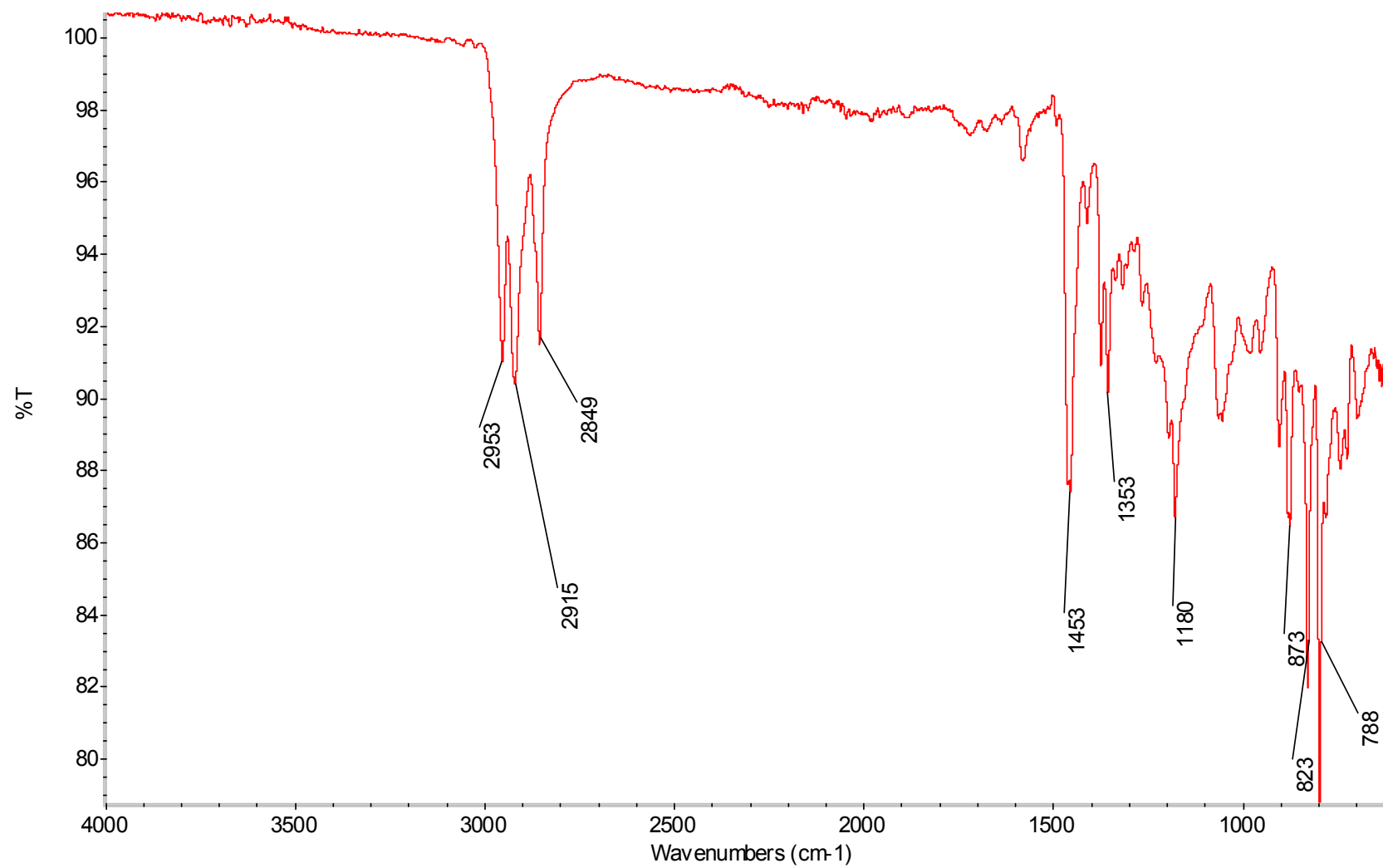
**Figure S4** MALDI-TOF Mass spectrum of **2**



**Figure S5** <sup>1</sup>H-NMR spectrum of **3**



**Figure S6**  $^{13}\text{C}$ -NMR spectrum of **3**



**Figure S7** IR spectrum of **3**



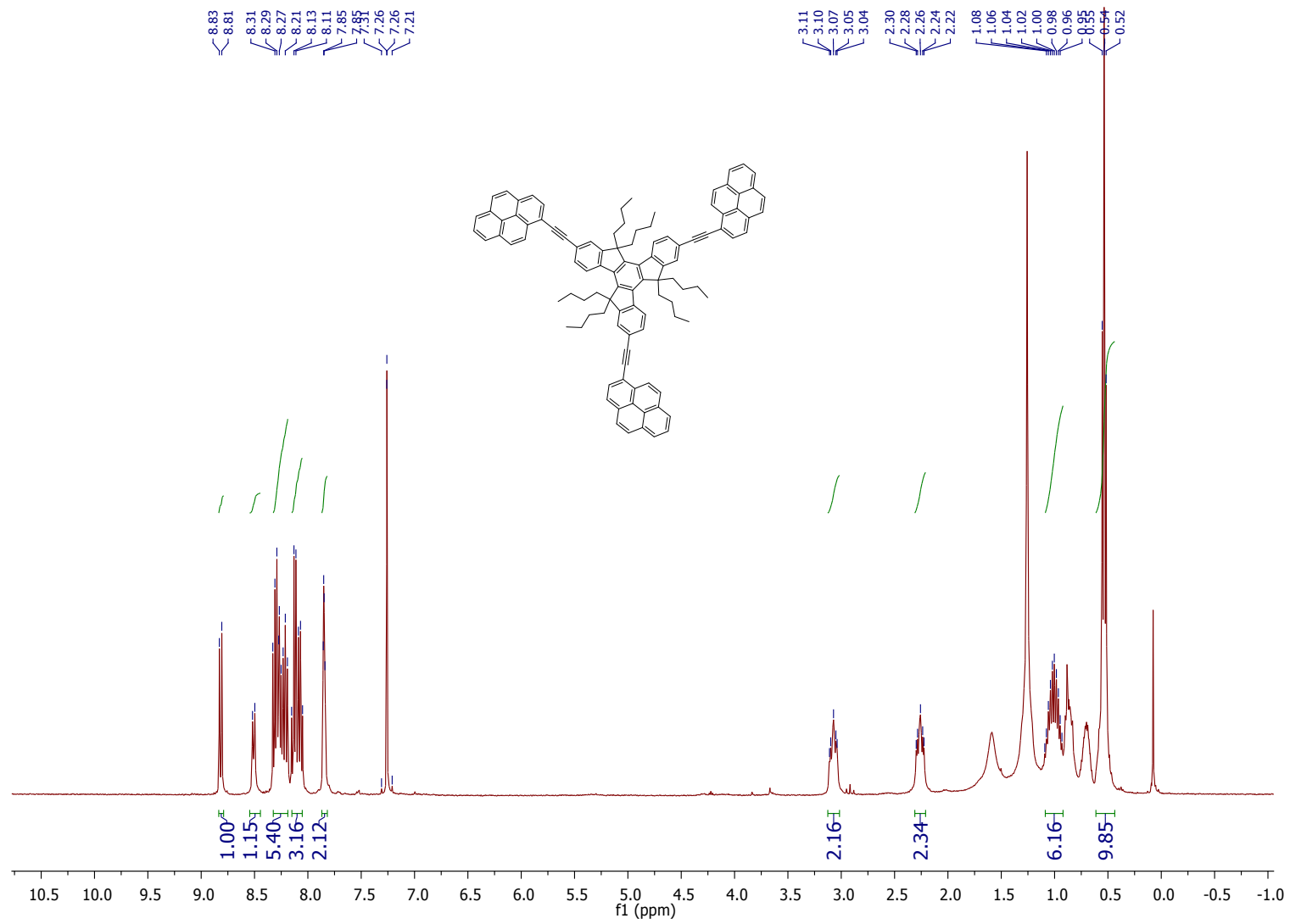
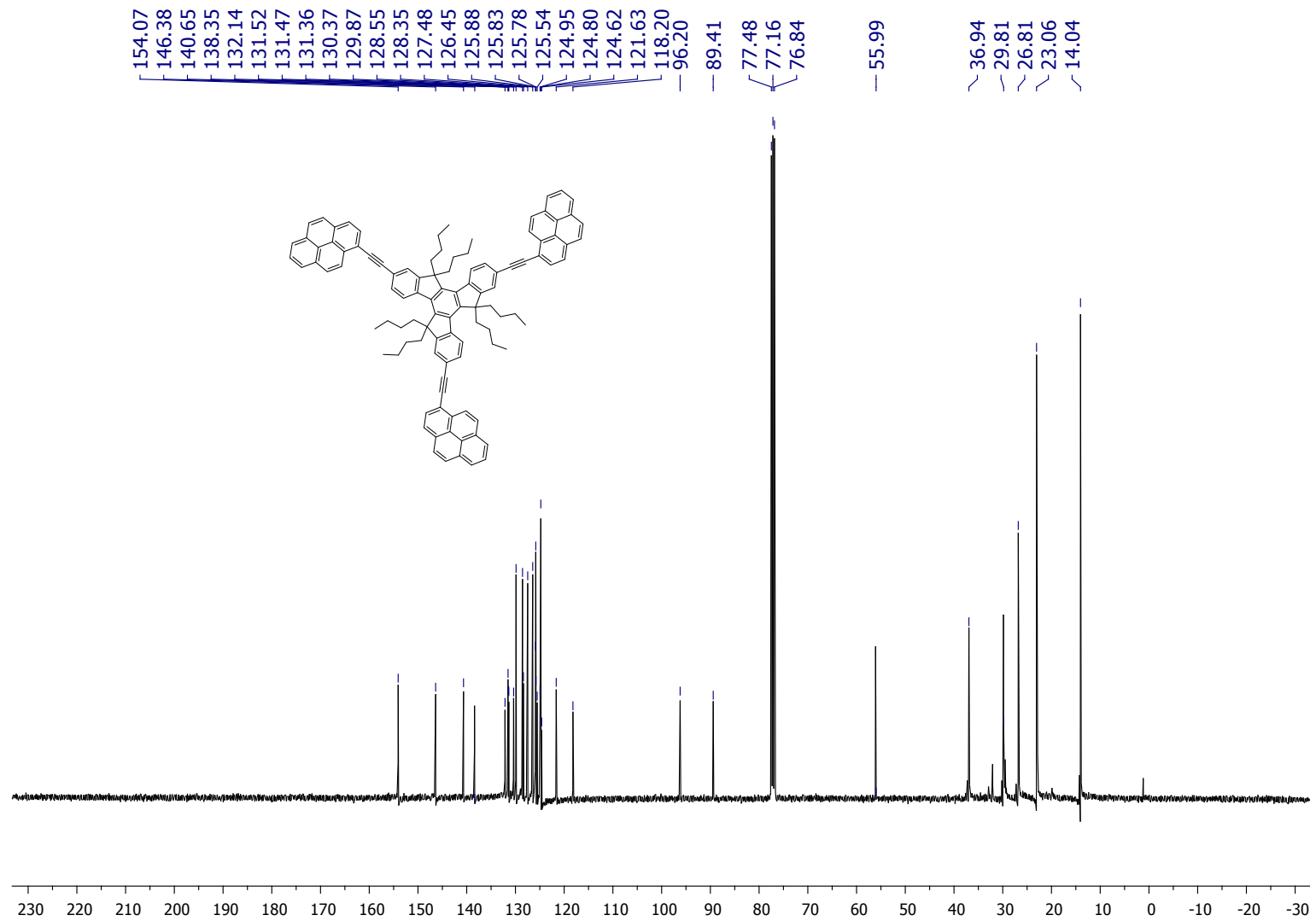
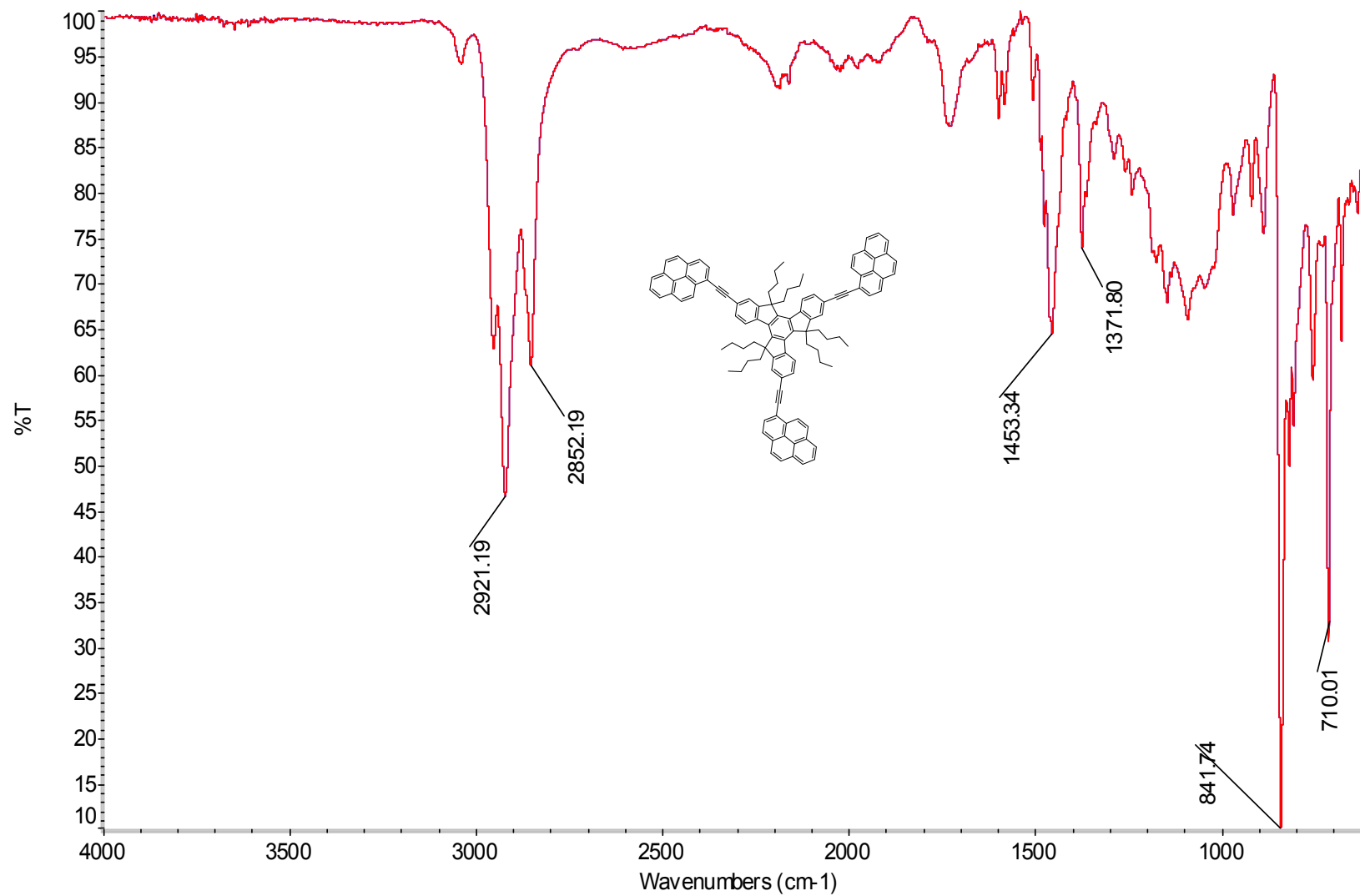


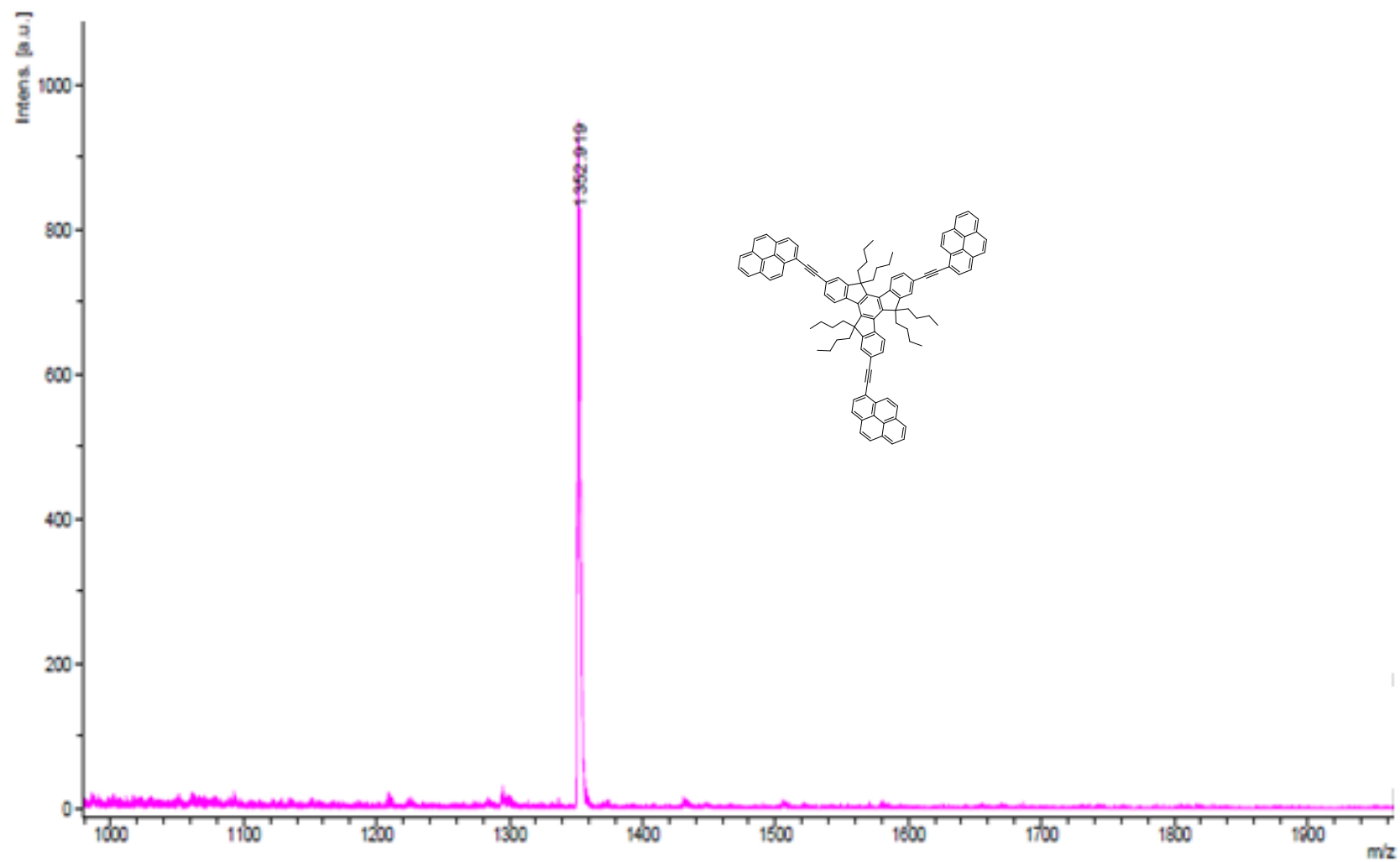
Figure S8 <sup>1</sup>H-NMR spectrum of **1**



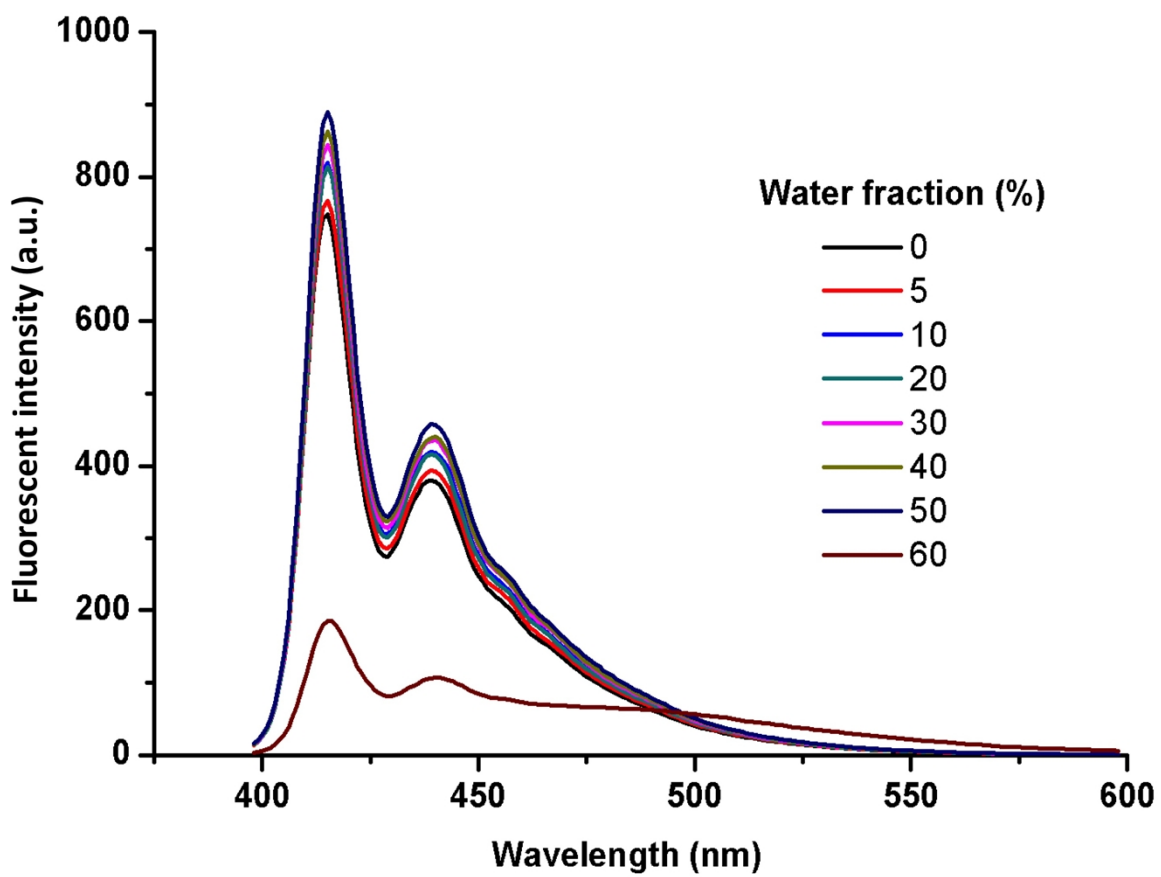
**Figure S9**  $^{13}\text{C}$ -NMR spectrum of **1**



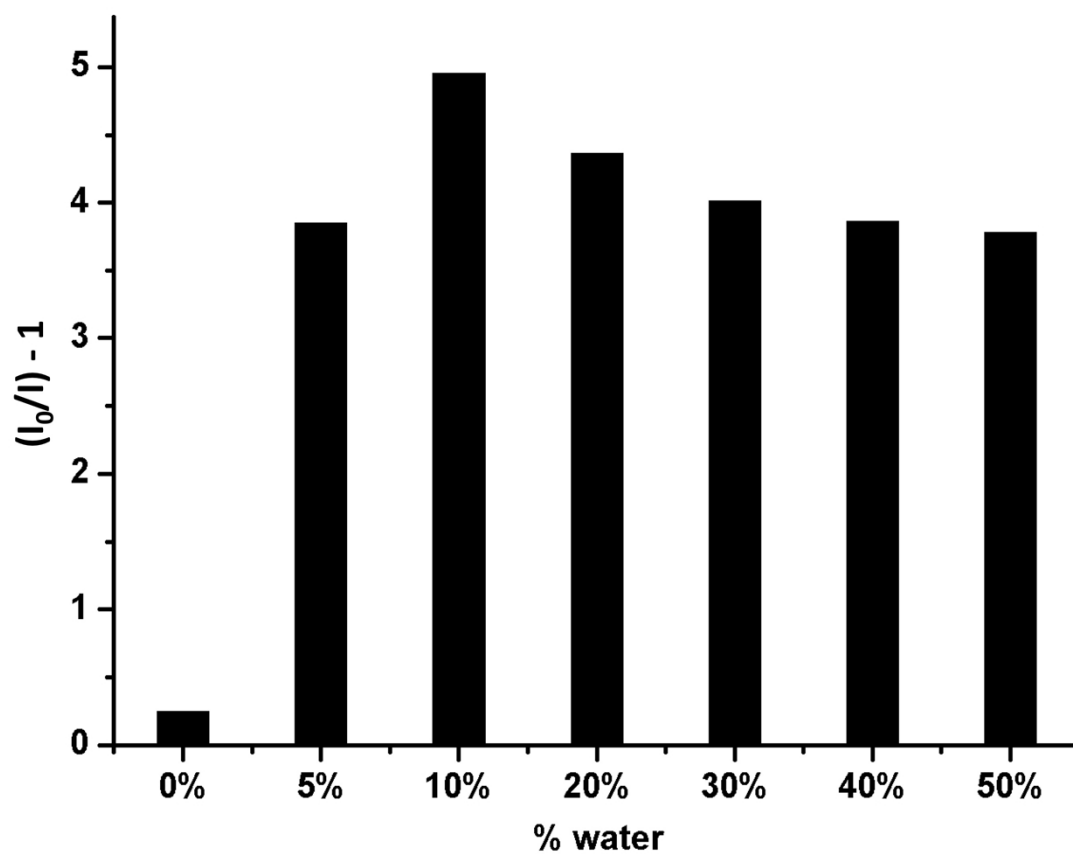
**Figure S10** IR spectrum of **1**



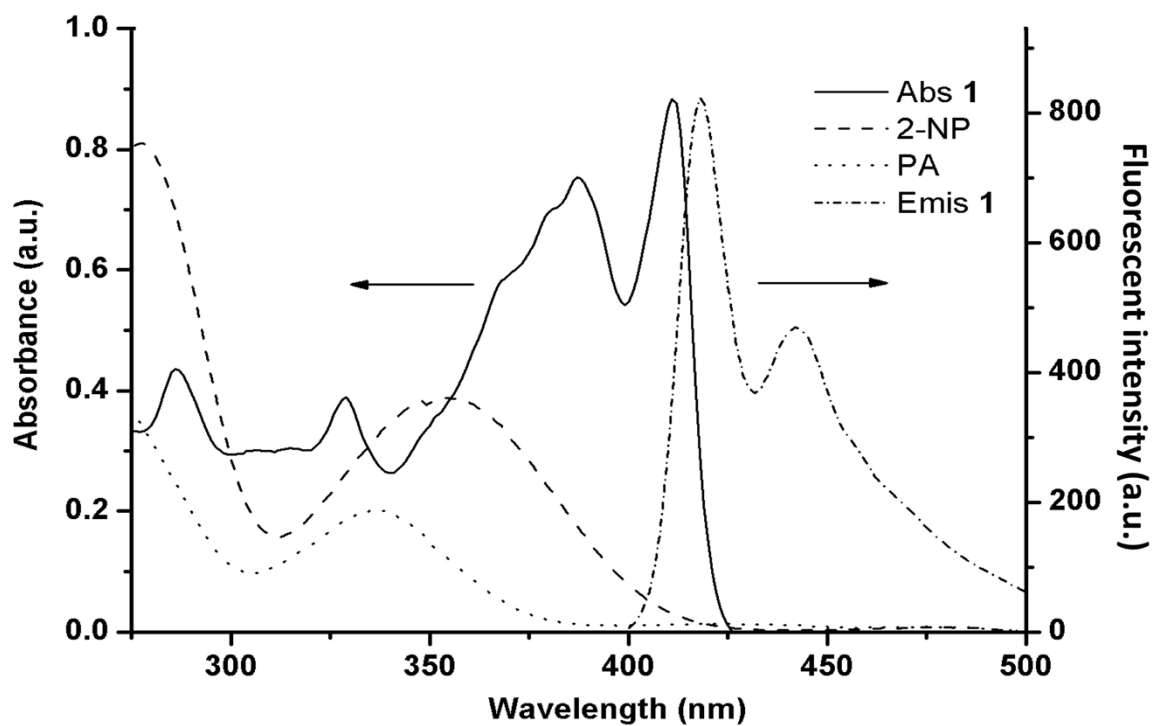
**Figure S11** MALDI-TOF Mass spectrum of **1**



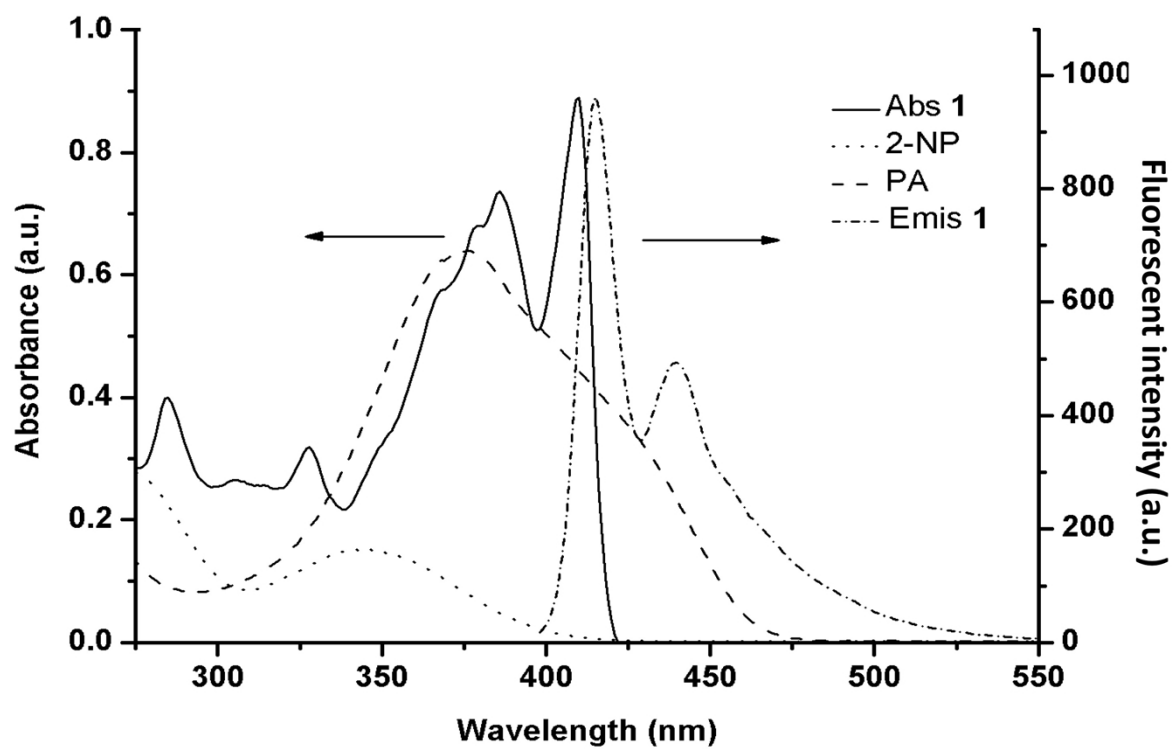
**Figure S12** Fluorescent spectra of **1** in THF with various water contents.



**Figure S13** Effect of water content in THF on fluorescent quenching efficiency of **1** (1  $\mu$ M) by picric acid (0.1 mM)

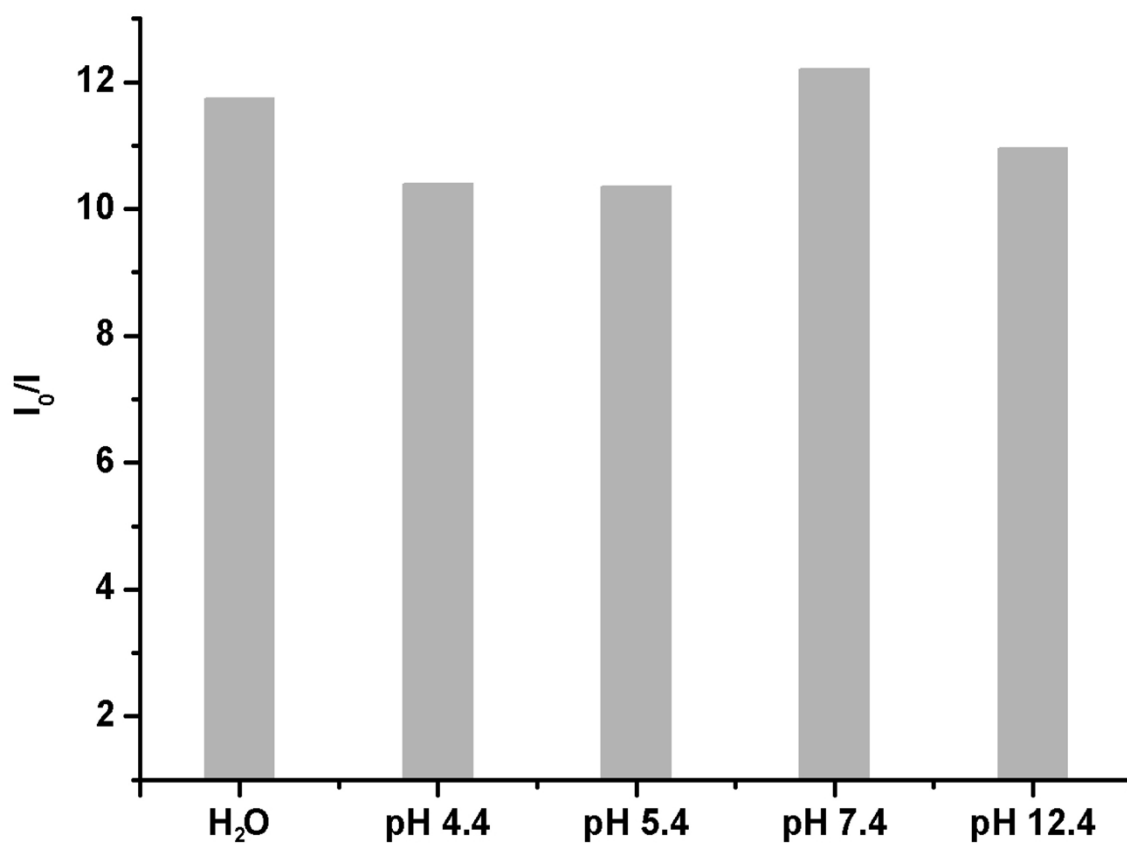


**Figure S14** Absorption spectra of **1**, 2-nitrophenol and picric acid, and emission spectrum of **1** in  $\text{CHCl}_3$



**Figure S15** Absorption spectra of **1**, 2-nitrophenol and picric acid, and emission spectrum of **1** in 10% H<sub>2</sub>O in THF.





**Figure S16** Fluorogenic responses of **1** by picric acid in THF with 10% aqueous buffer of various pHs.