

Supplementary Material

**Efficient Synthesis of Novel Porphyrin Dimers with Versatile Linkers via Bis(dipyrromethanes) in an Excellent Mixed-solvent**

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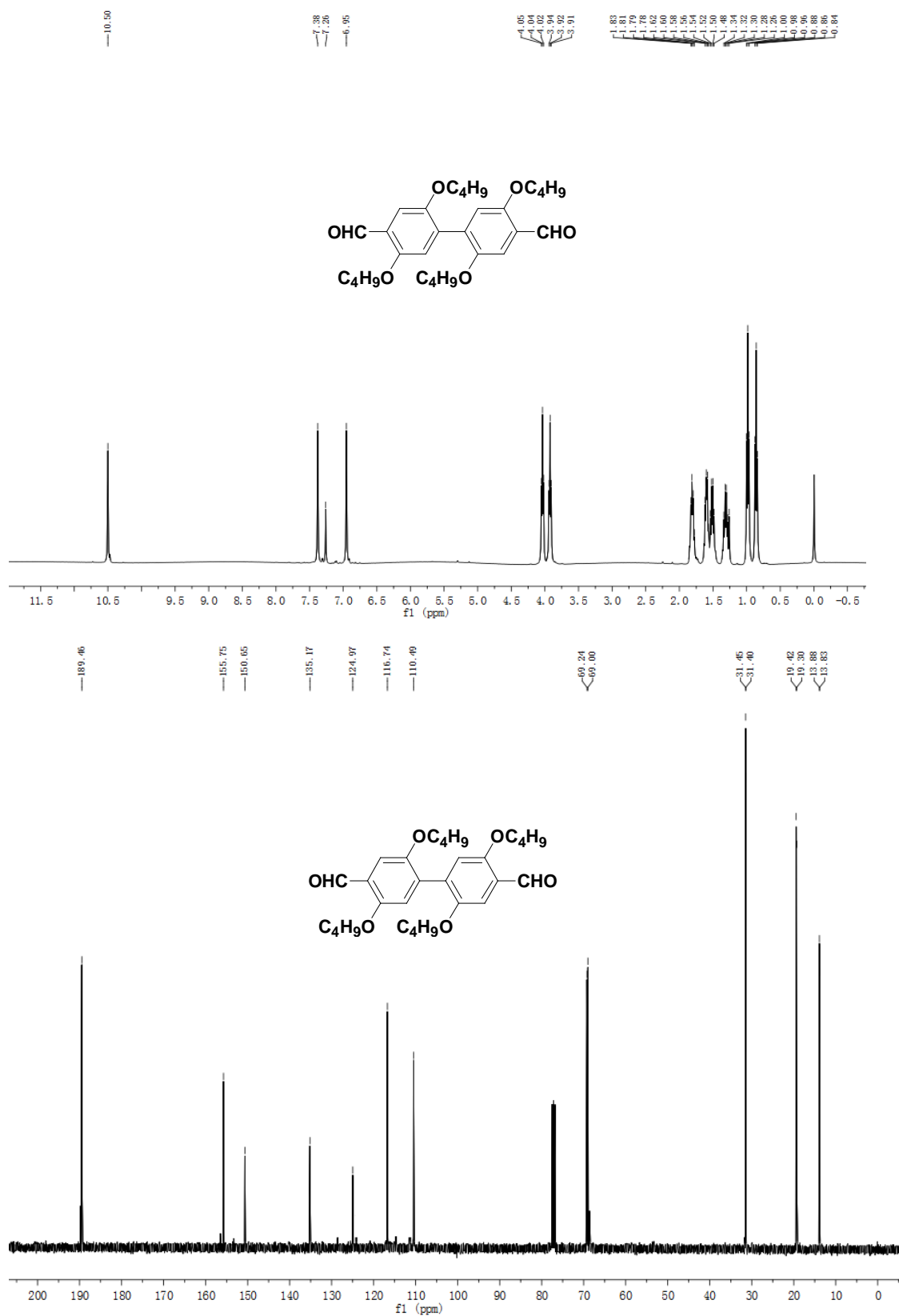
Email: [zhaohbhanlf@163.com](mailto:zhaohbhanlf@163.com)

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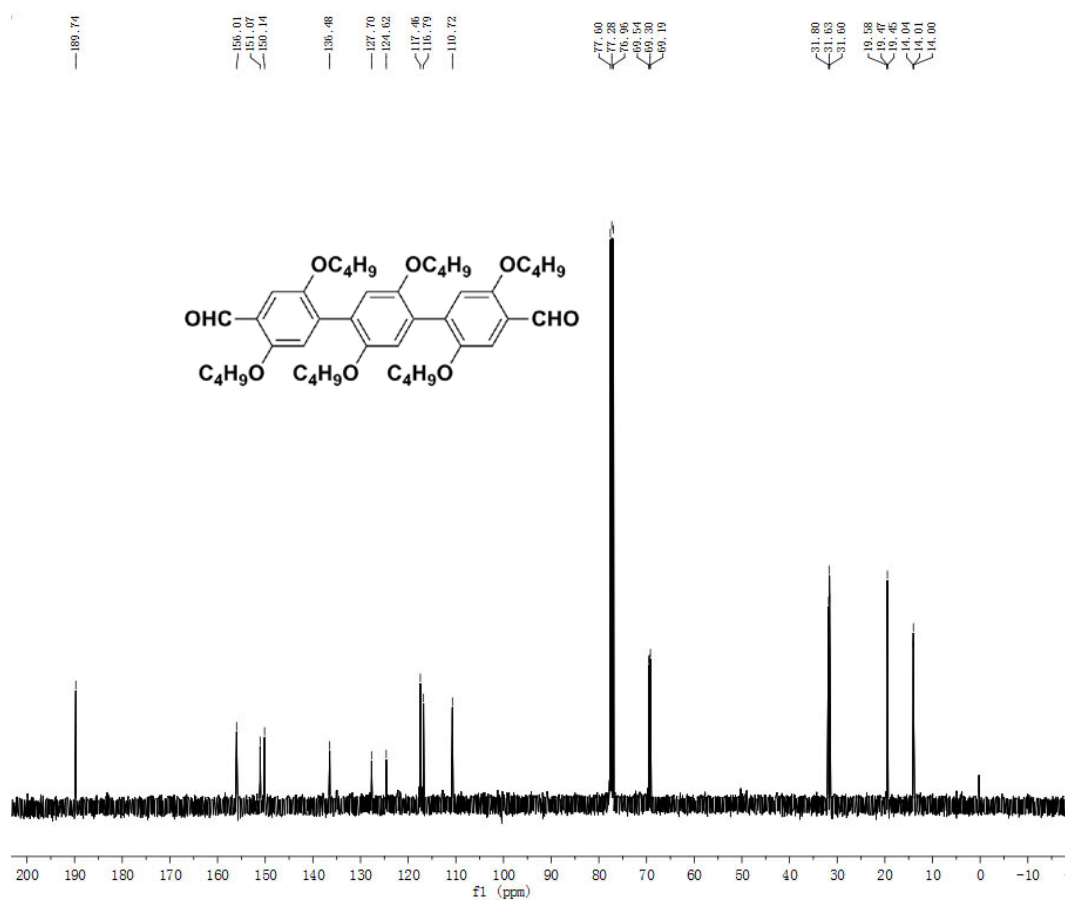
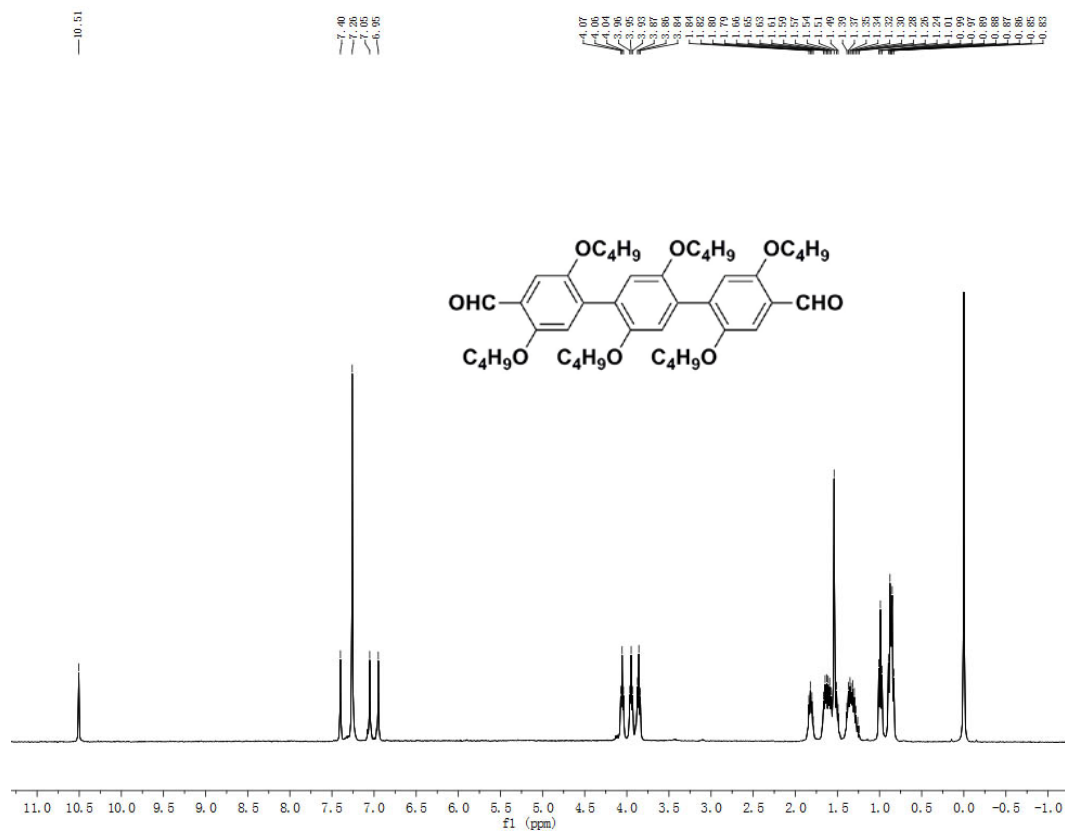
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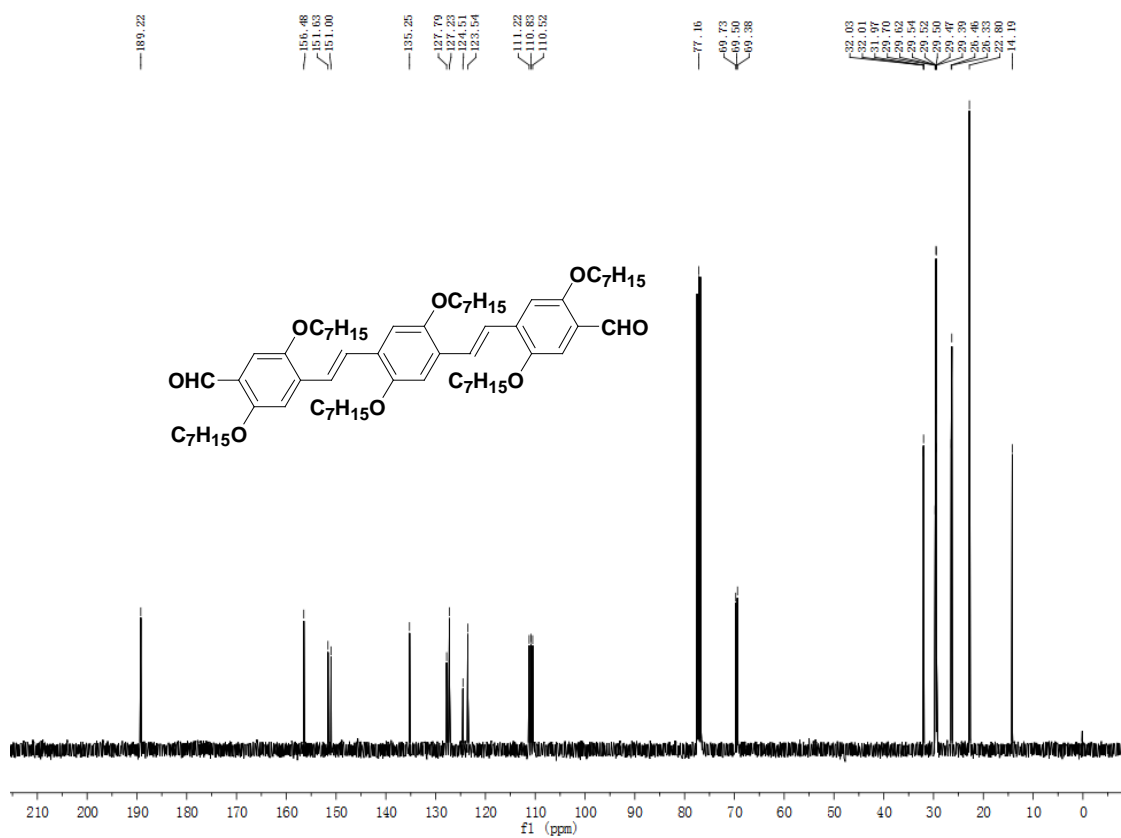
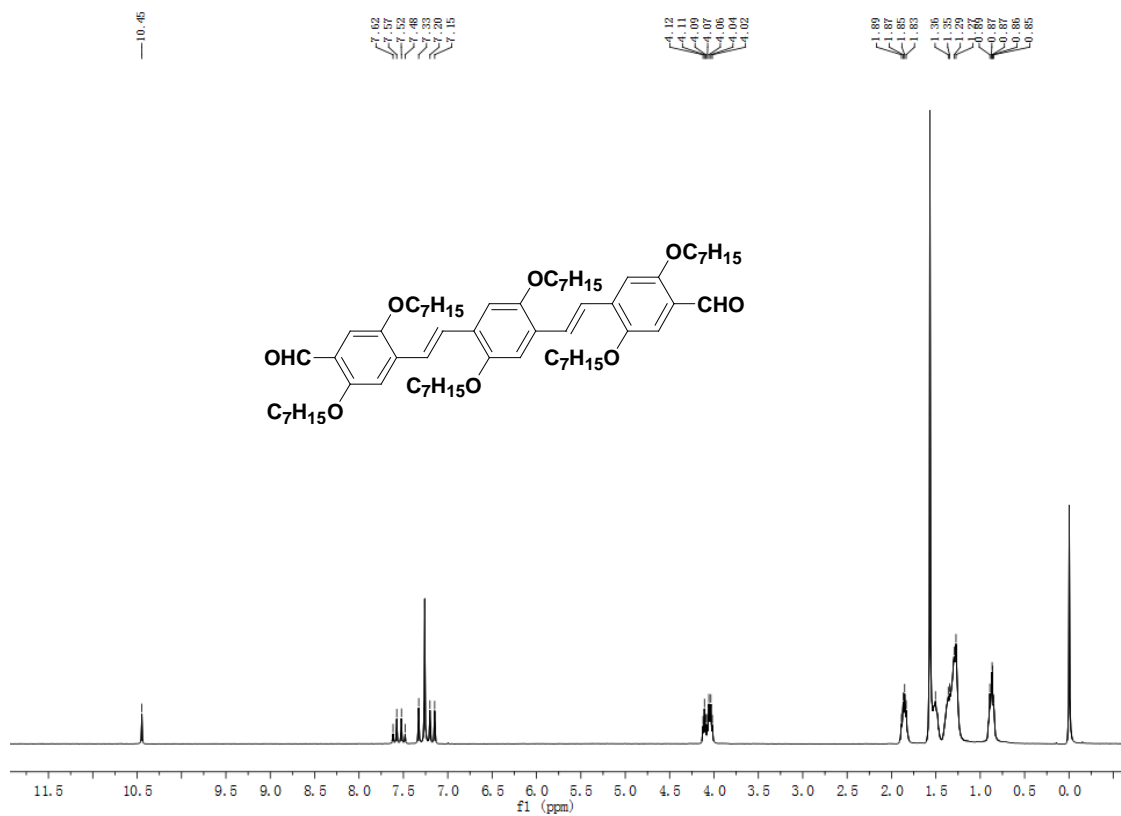
## Characterization Data: $^1\text{H}$ NMR and $^{13}\text{C}$ NMR Spectra



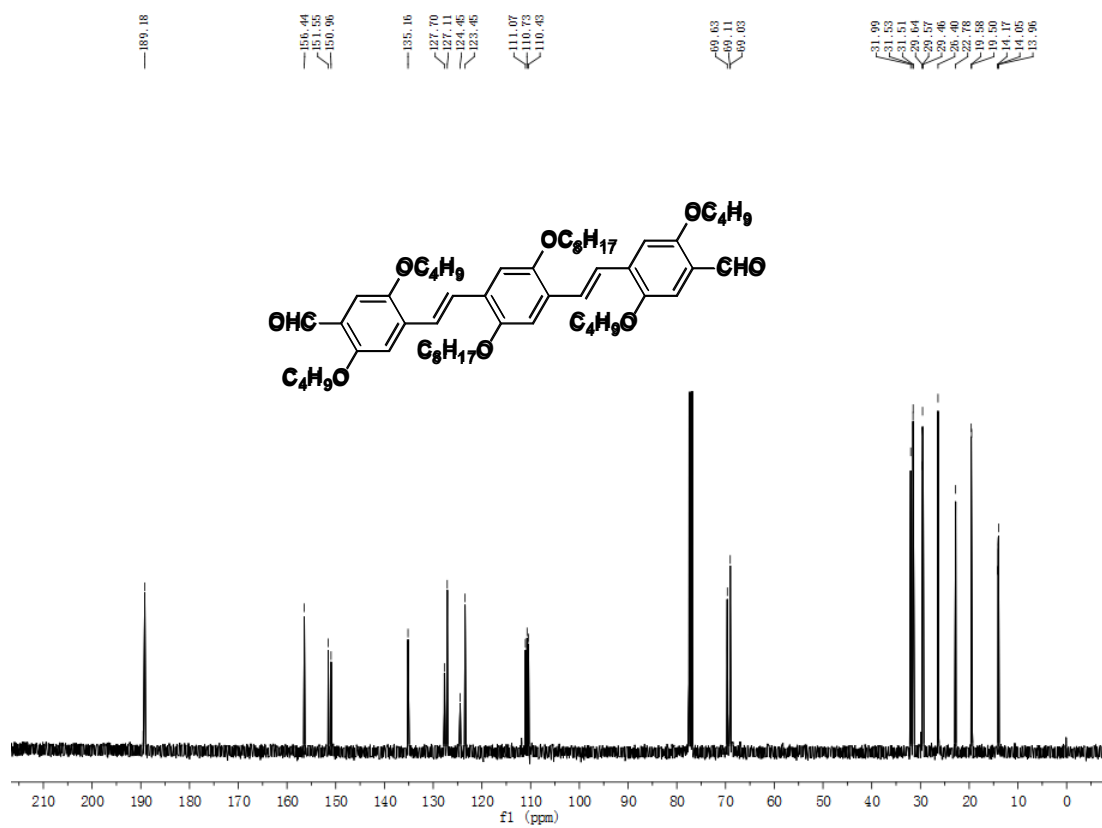
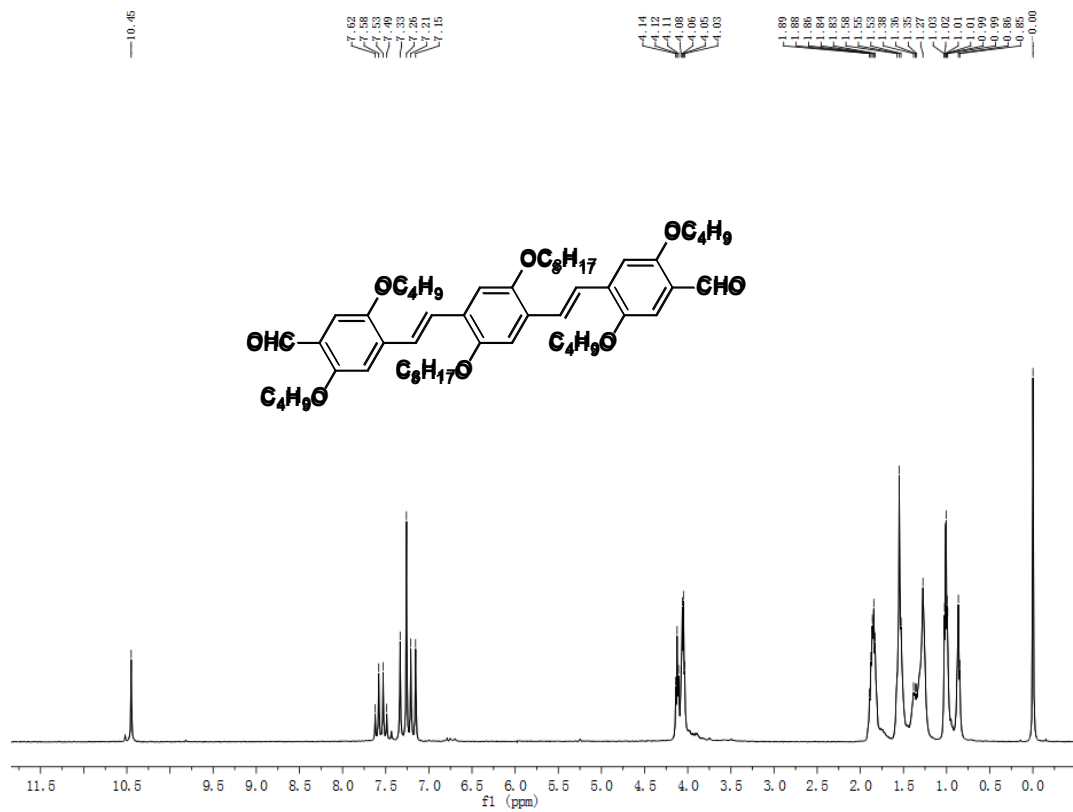
$^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of compound **1e**.



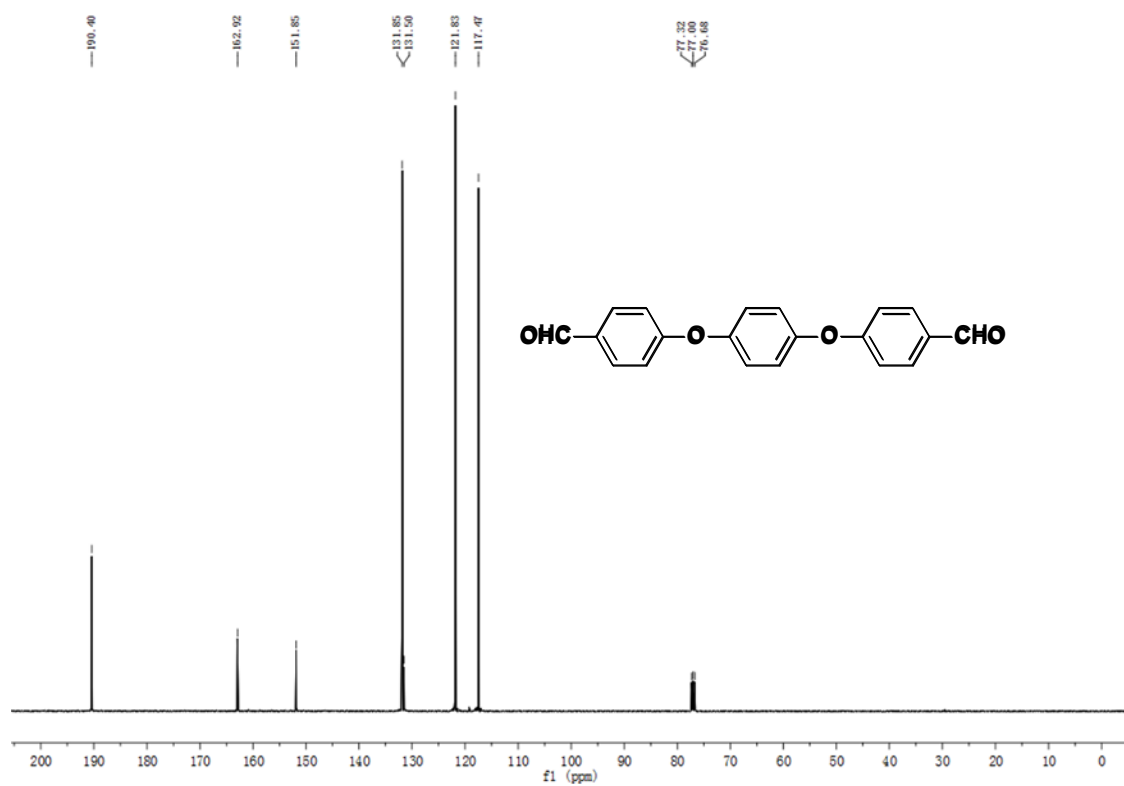
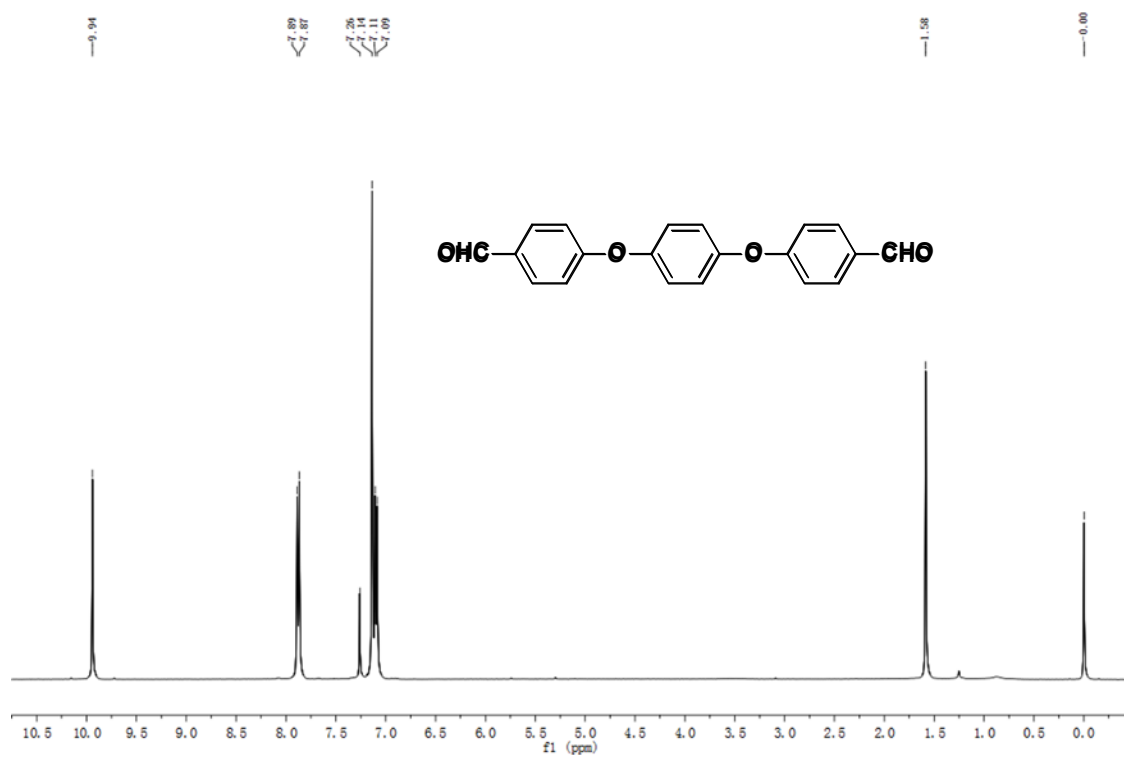
$^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of compound **1f**.



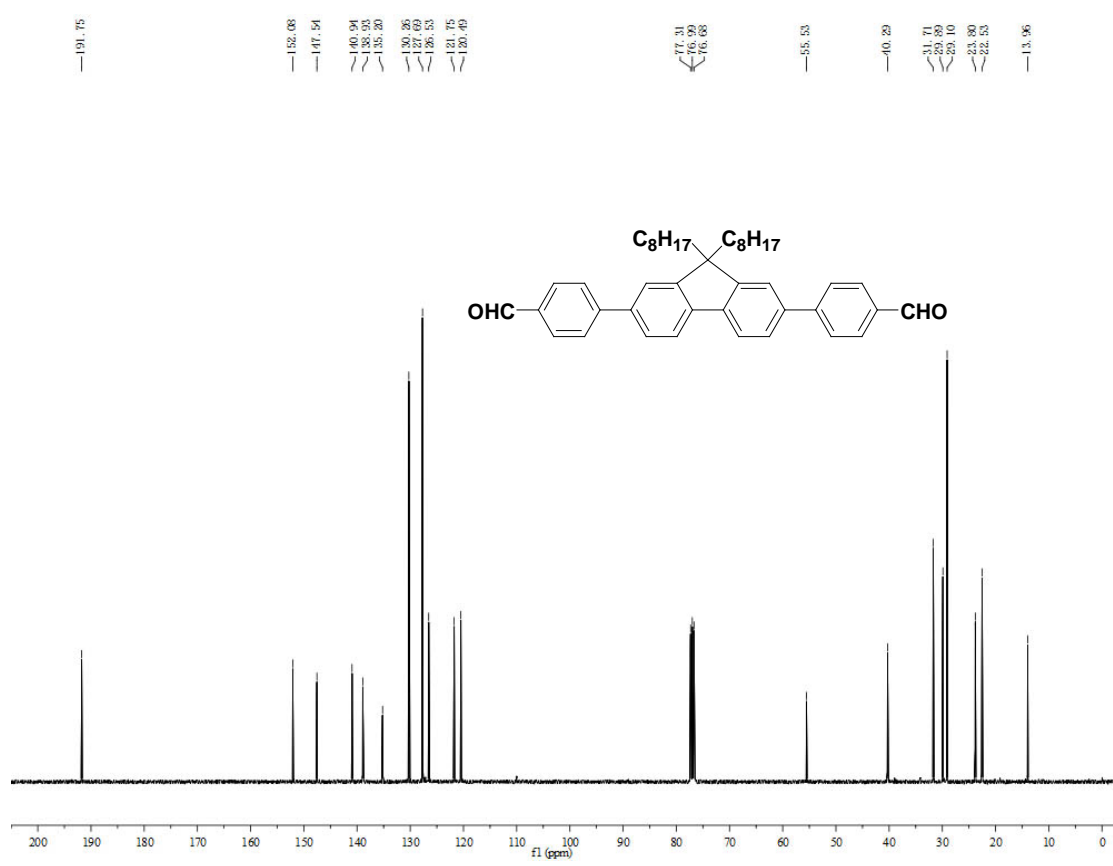
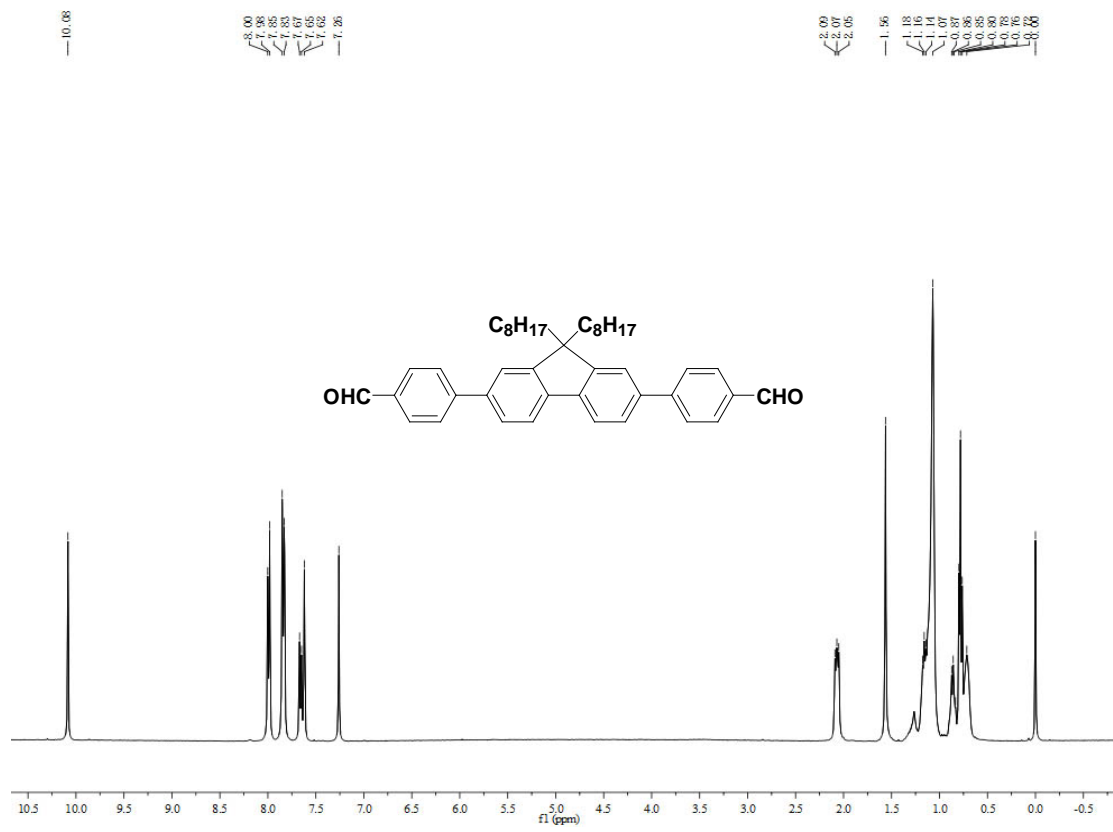
$^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of compound **1g**.



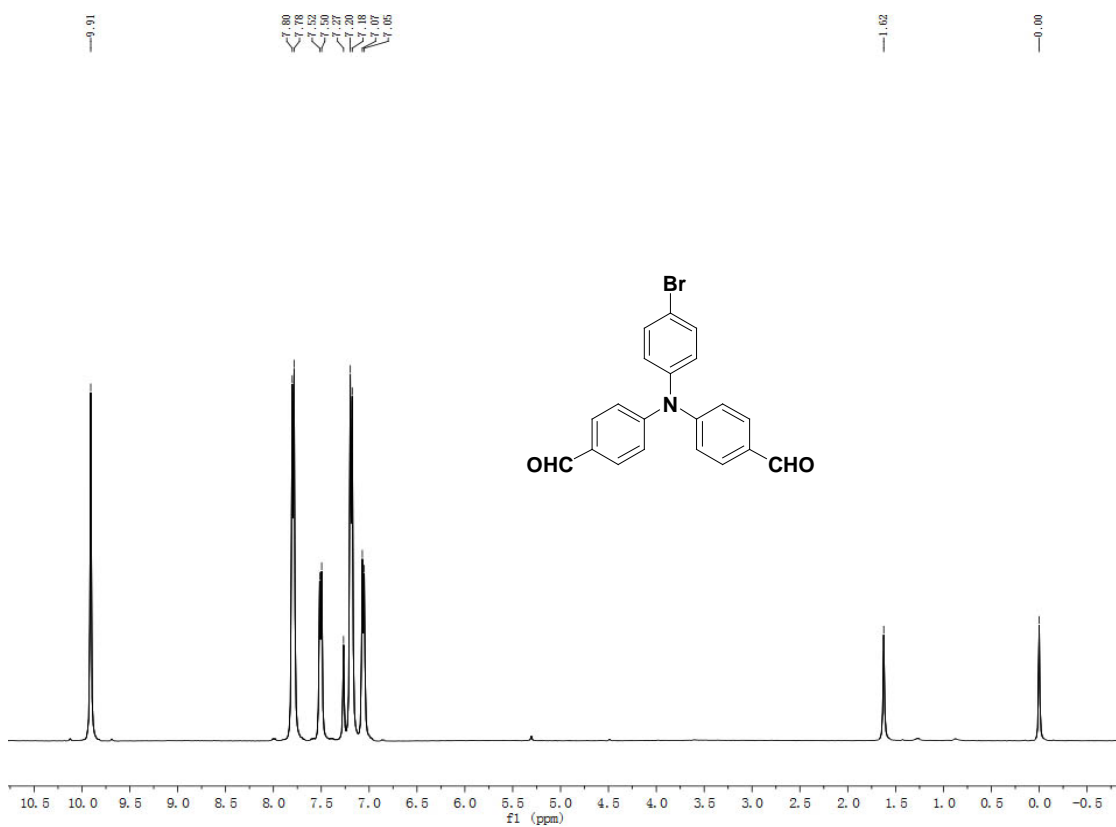
$^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of compound **1h**.



<sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of compound **1j**.

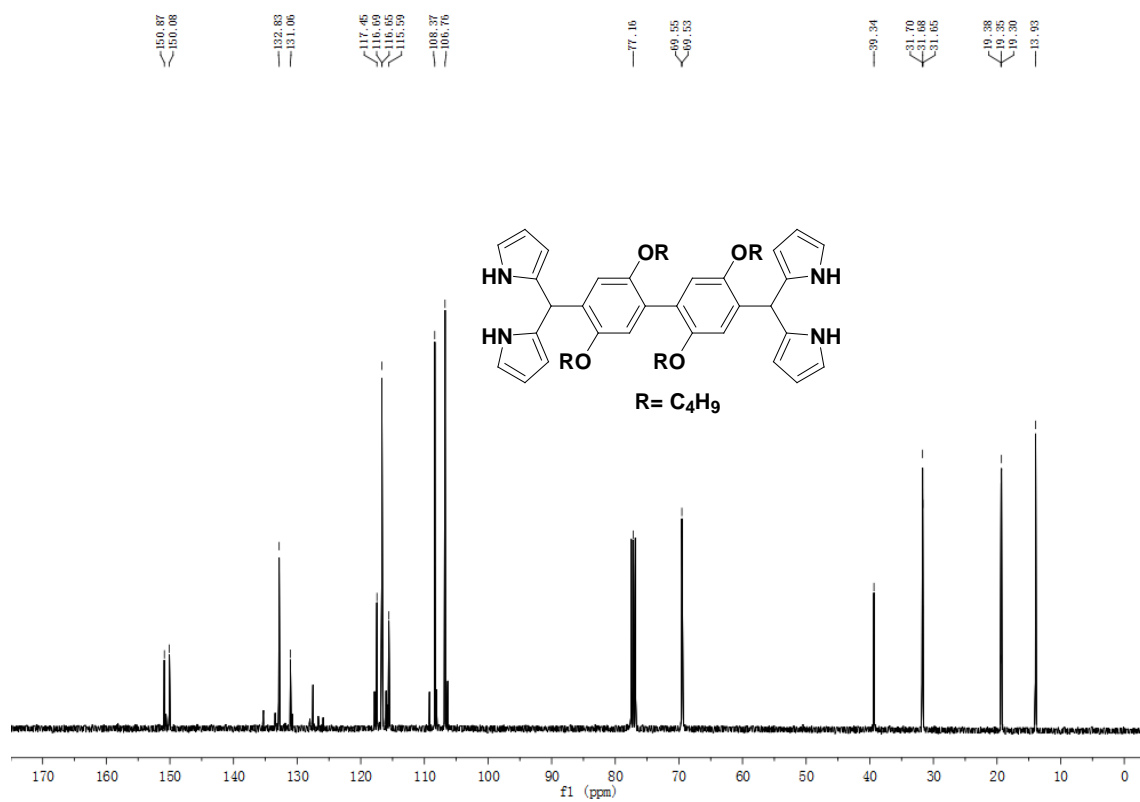
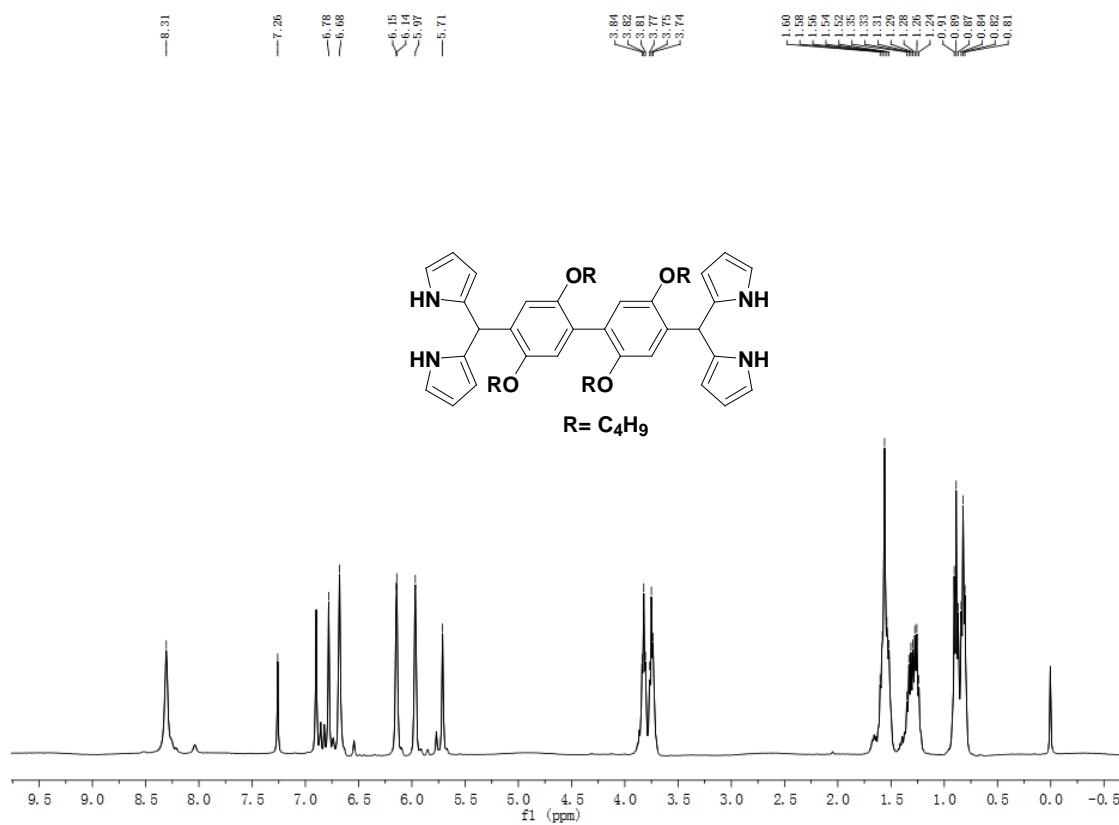


$^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of compound **1m**.

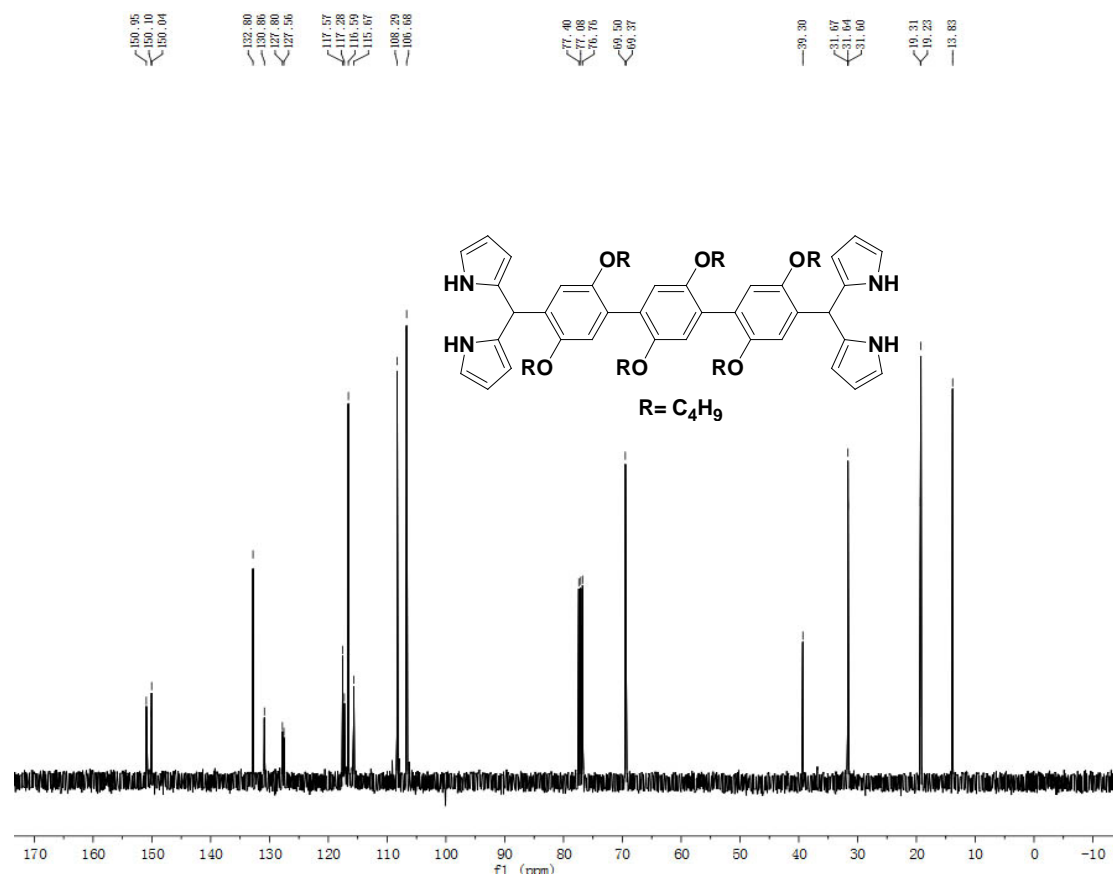
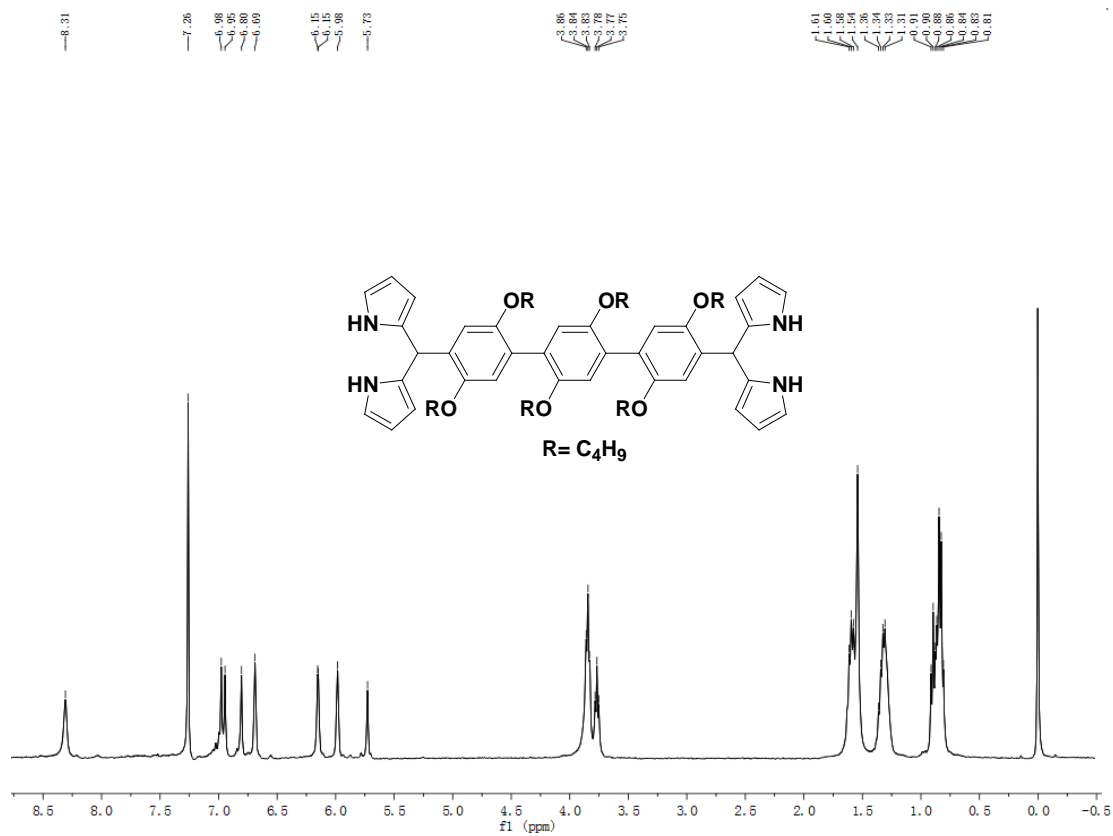


<sup>1</sup>H NMR spectrum of compound **11**

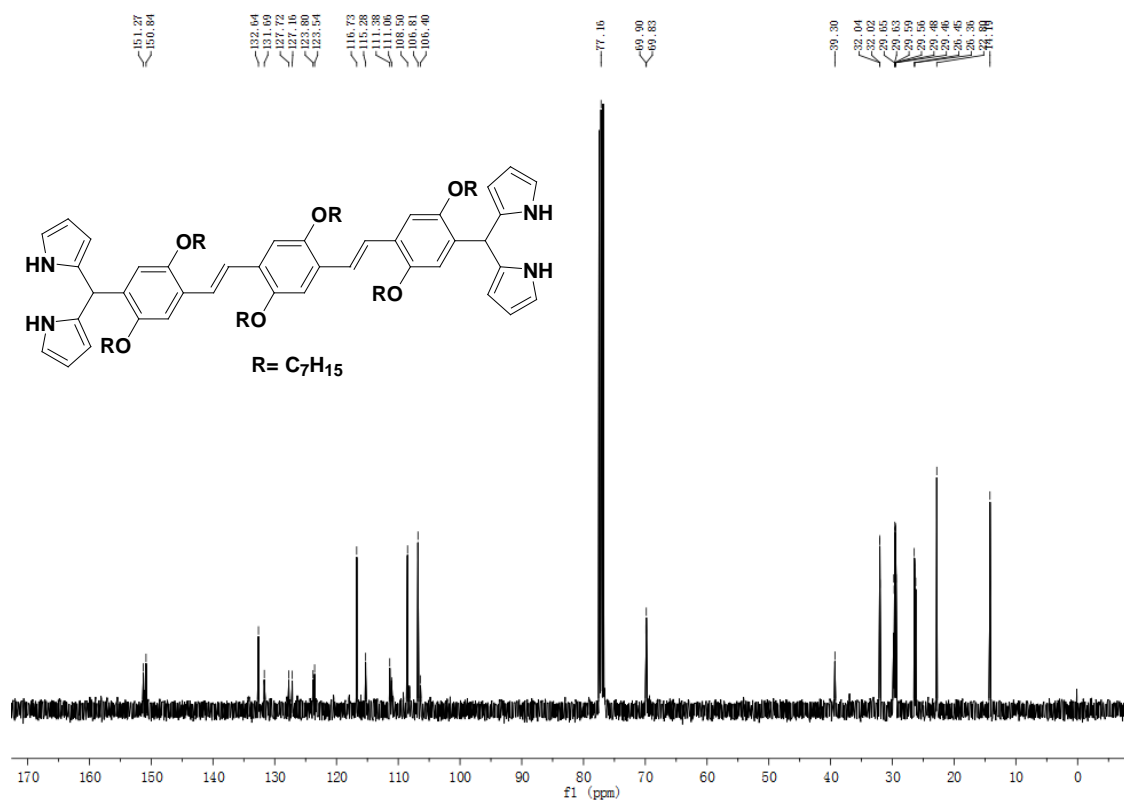
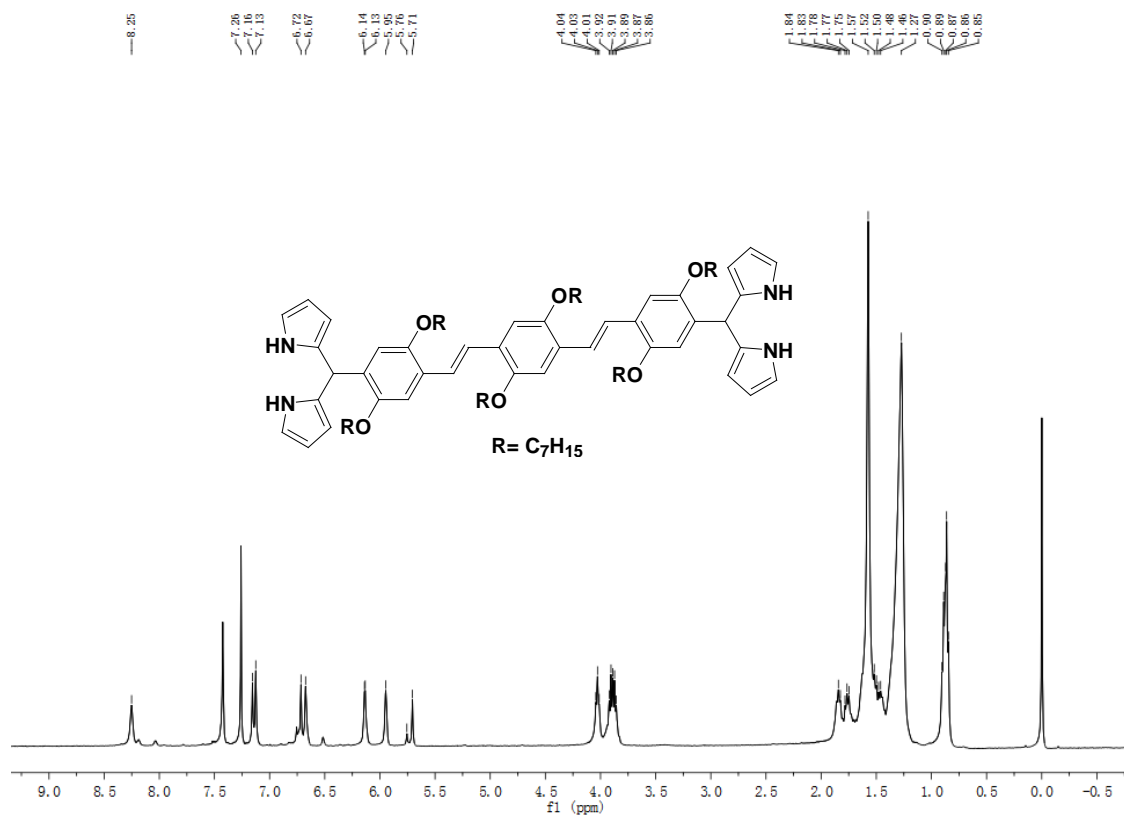




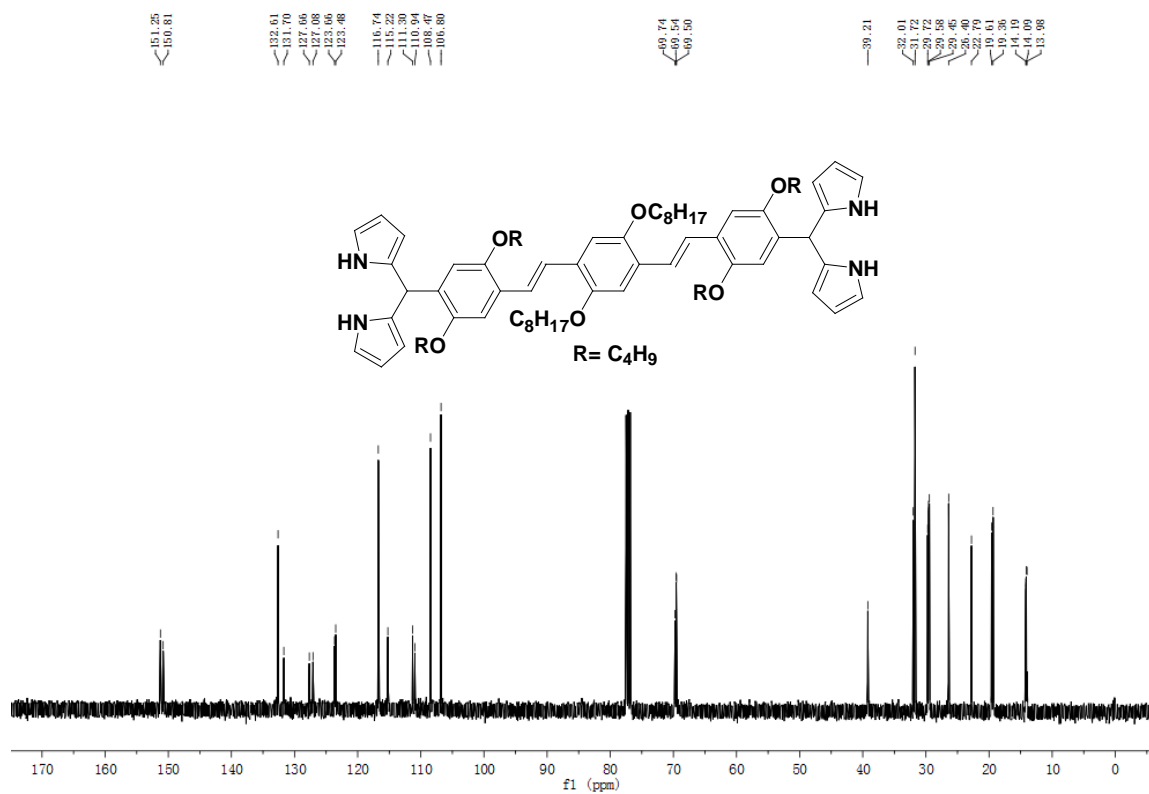
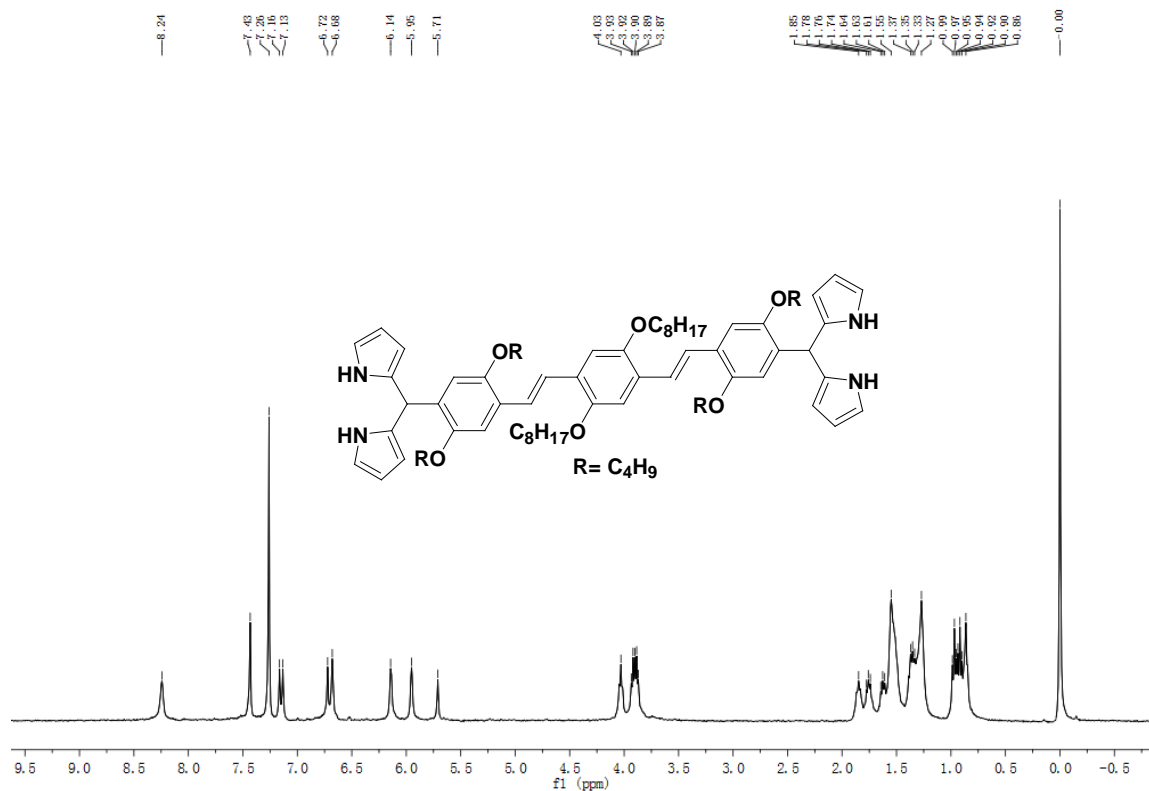
<sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of compound **3e**.



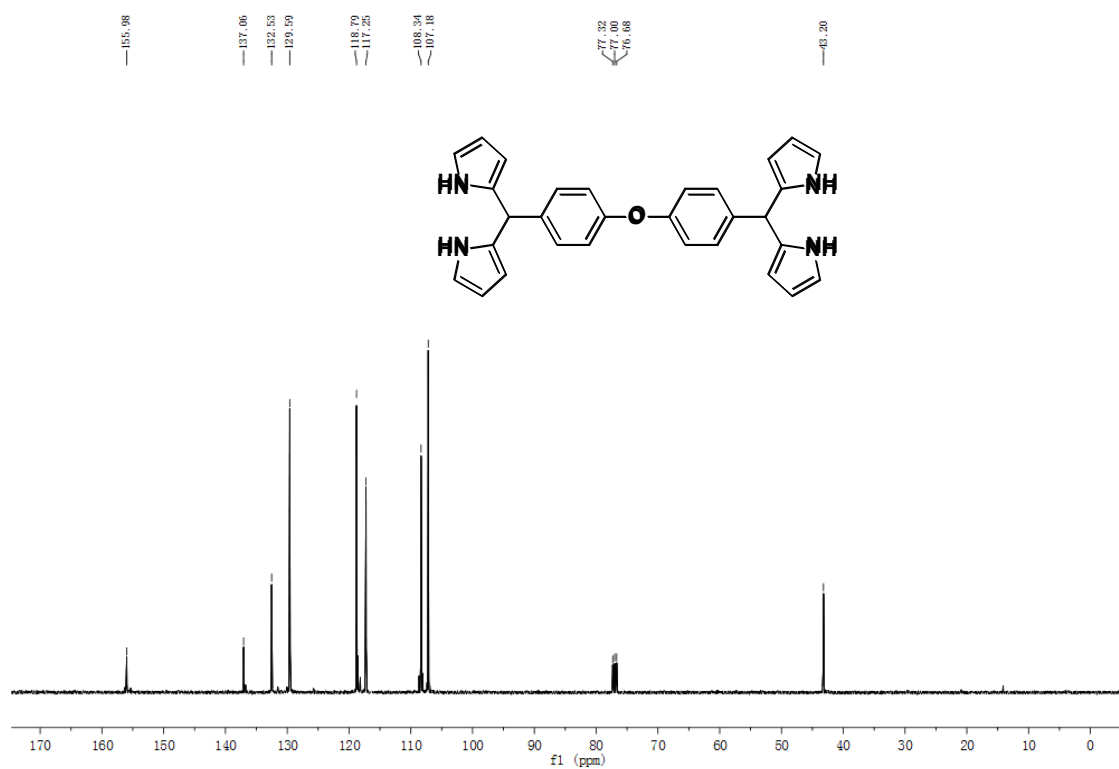
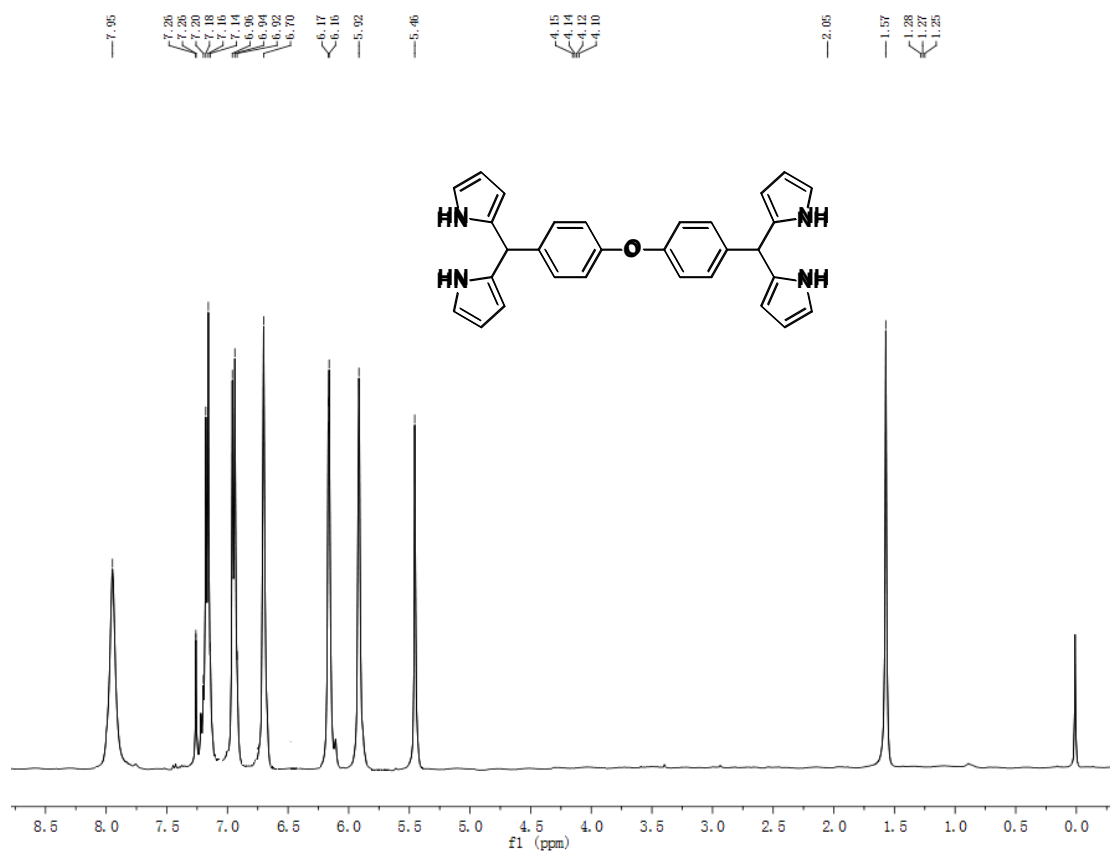
<sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of compound **3f**.



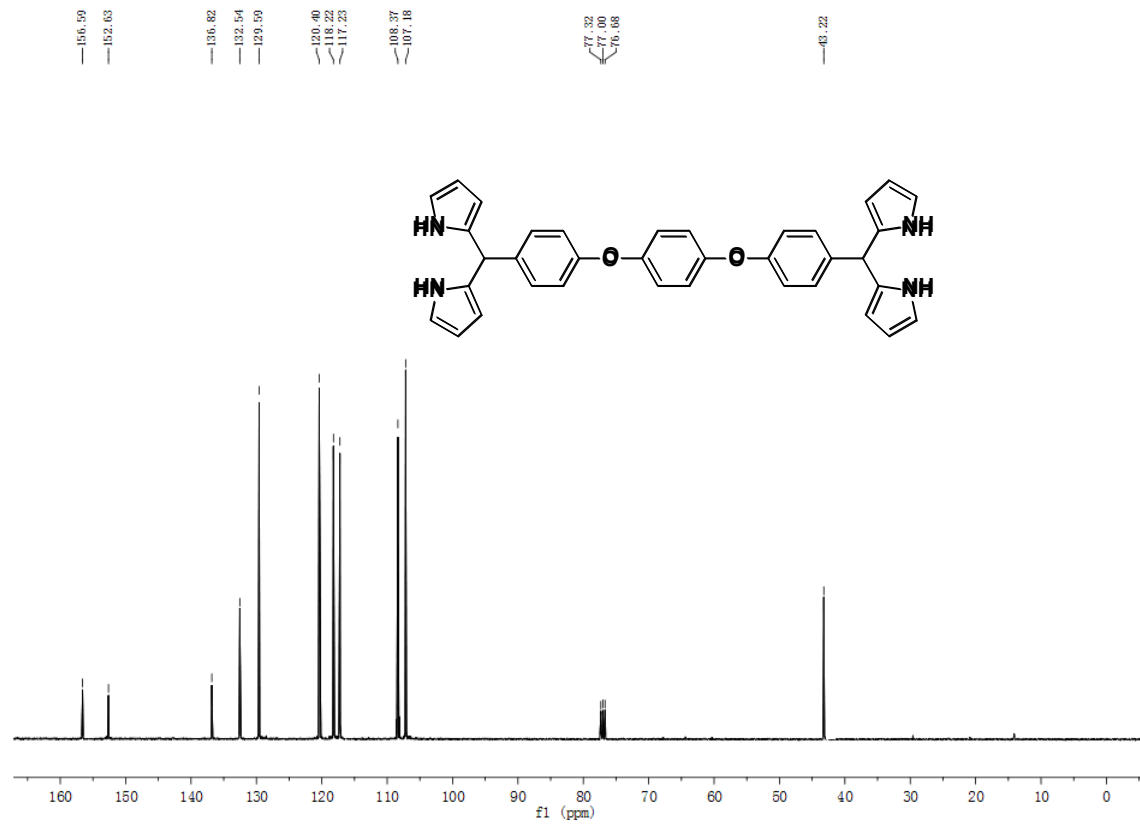
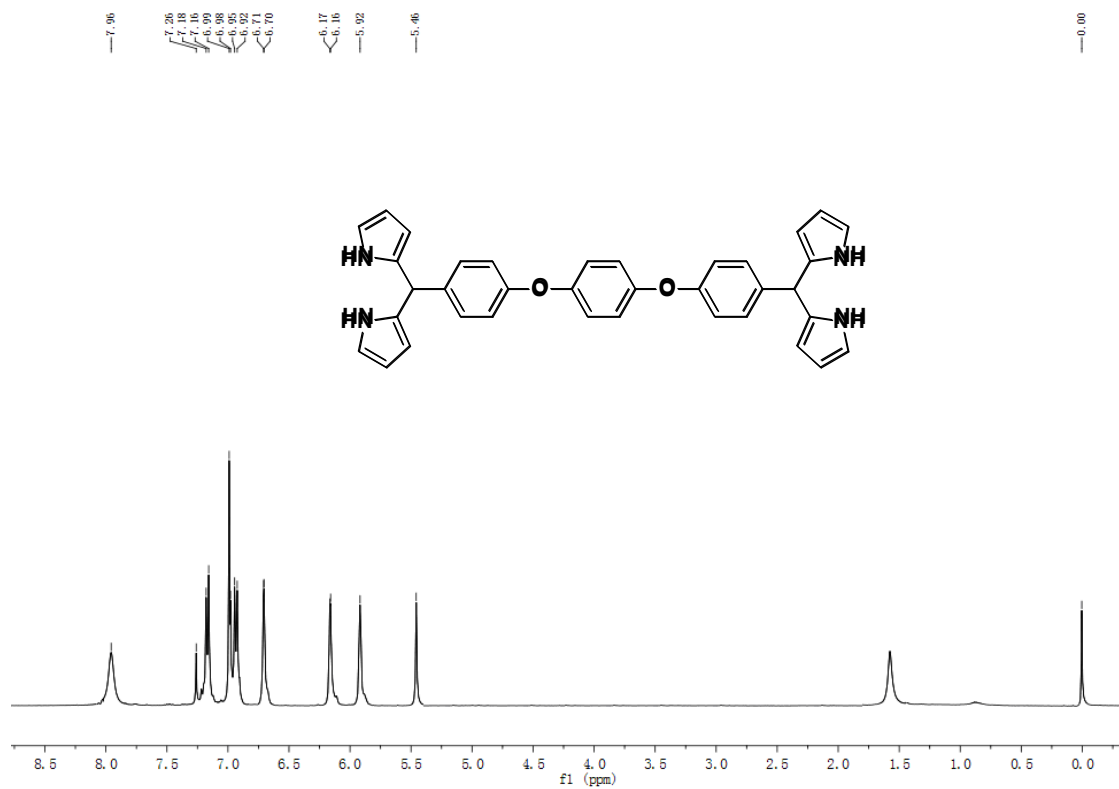
<sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of compound **3g**.



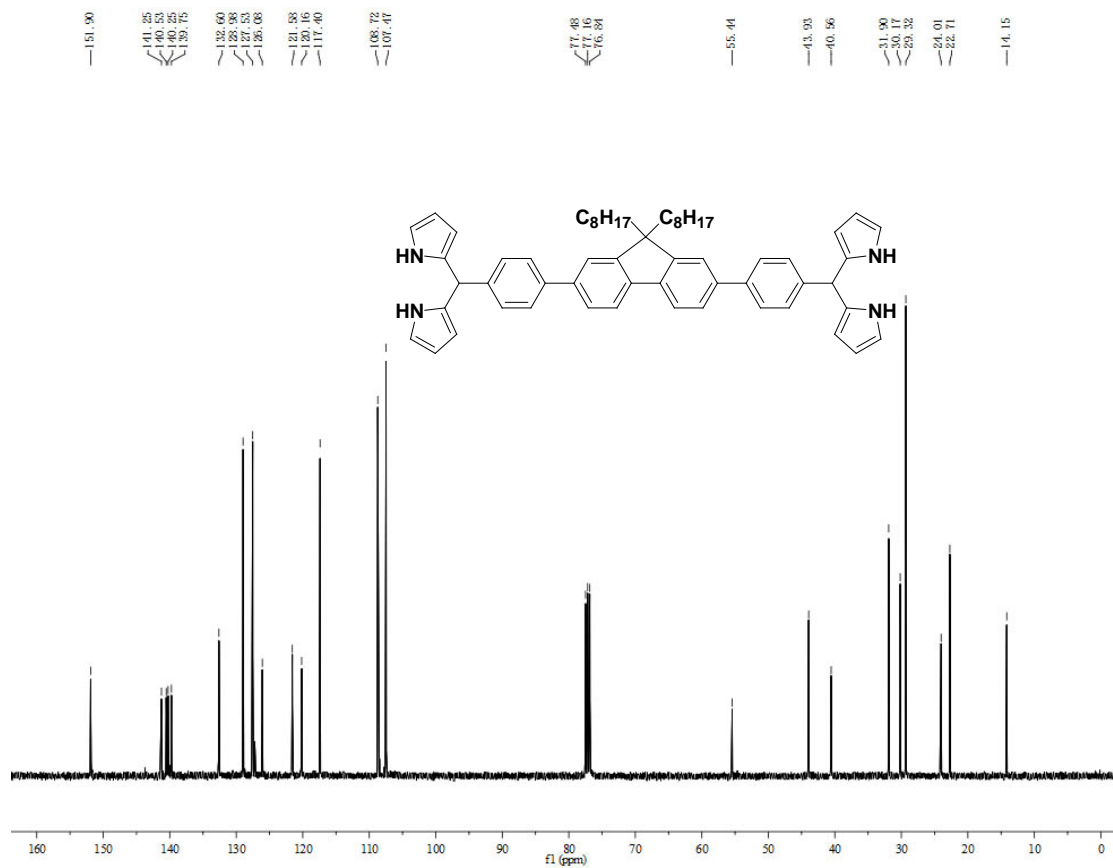
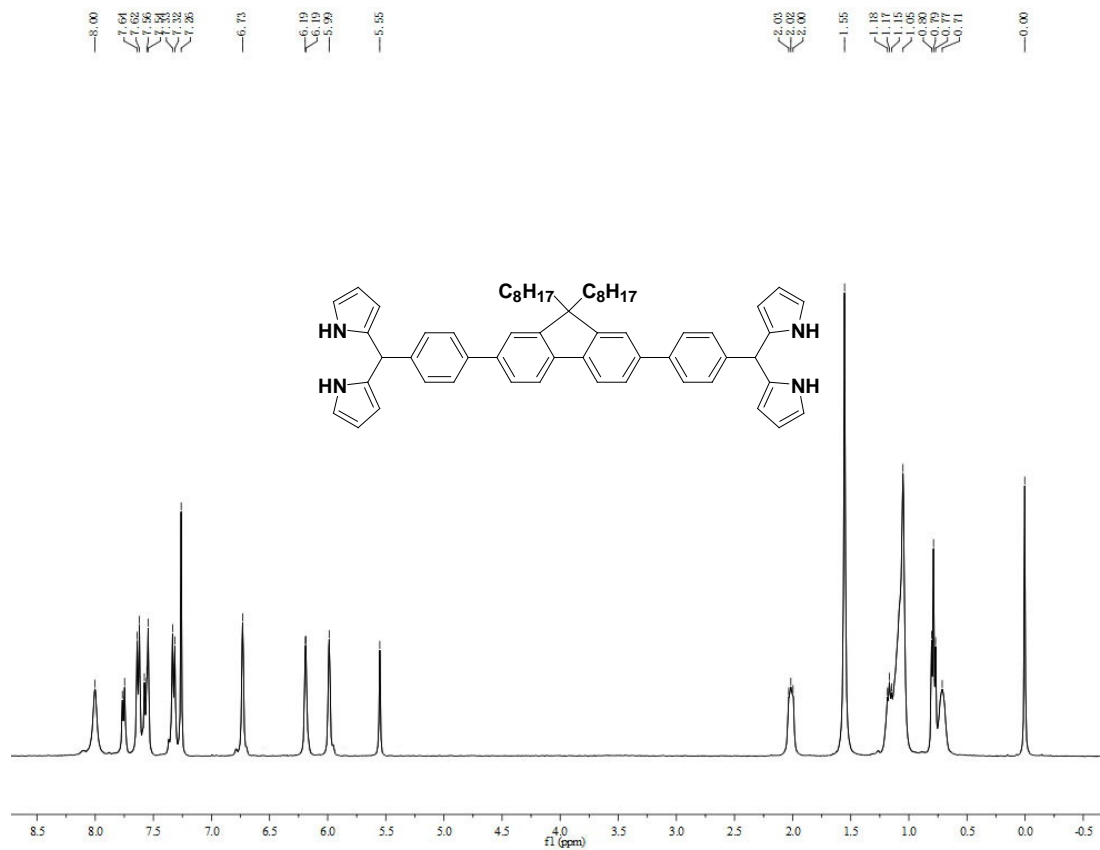
$^1\text{H}$  NMR and  $^{13}\text{C}$  NMR spectra of compound **3h**.



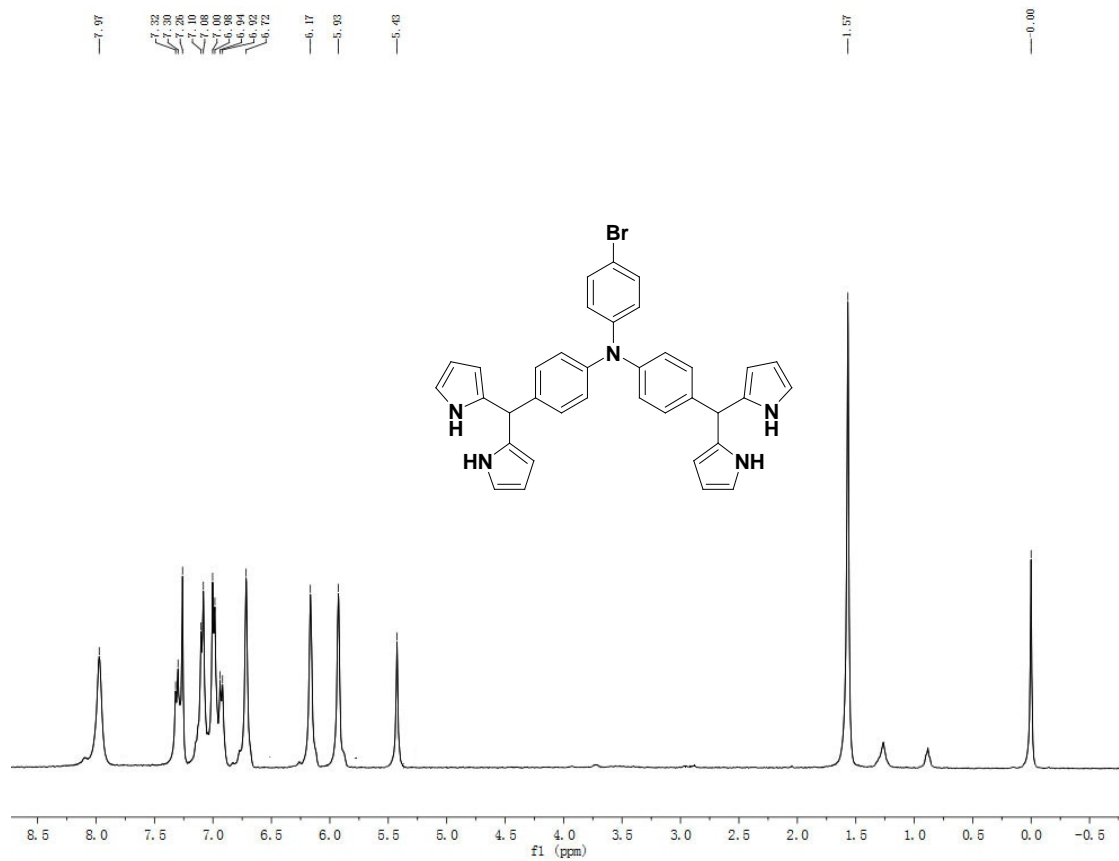
$^1\text{H NMR}$  and  $^{13}\text{C NMR}$  spectra of compound **3i**.



<sup>1</sup>H NMR and <sup>13</sup>C NMR spectra of compound **3j**.



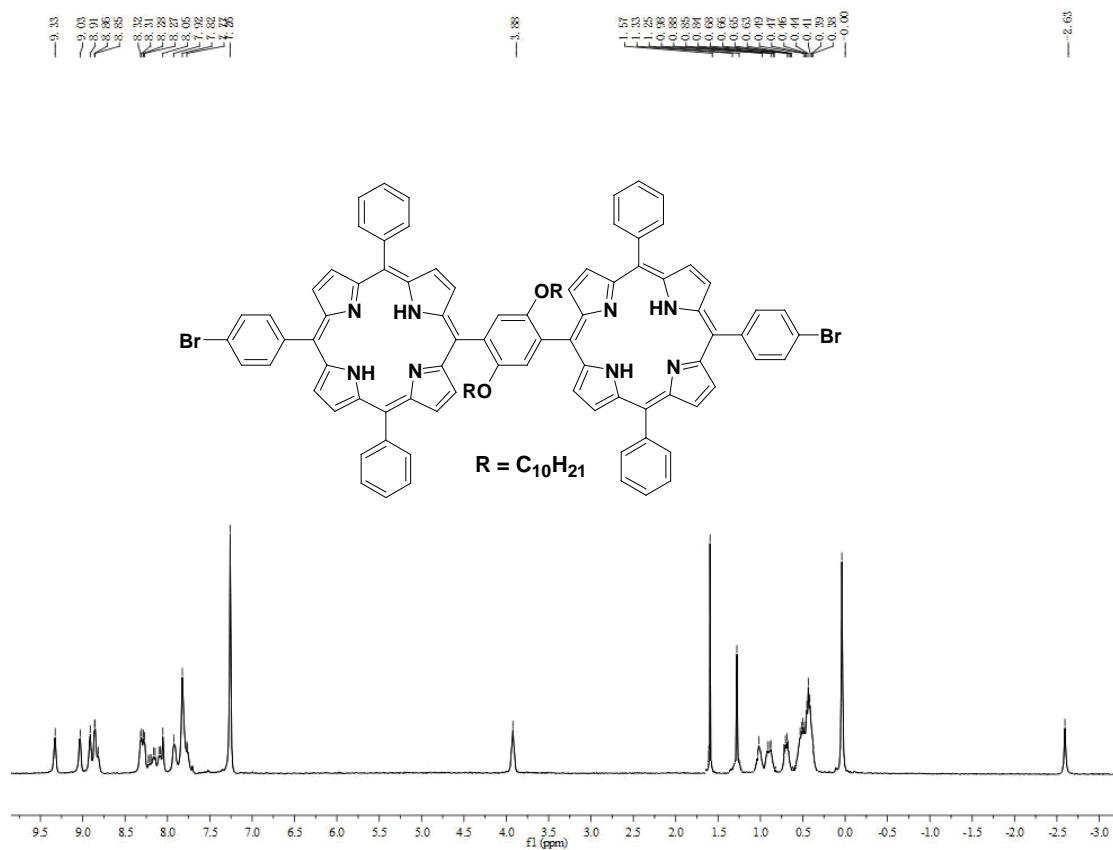
$^1H$  NMR and  $^{13}C$  NMR spectra of compound **3m**.



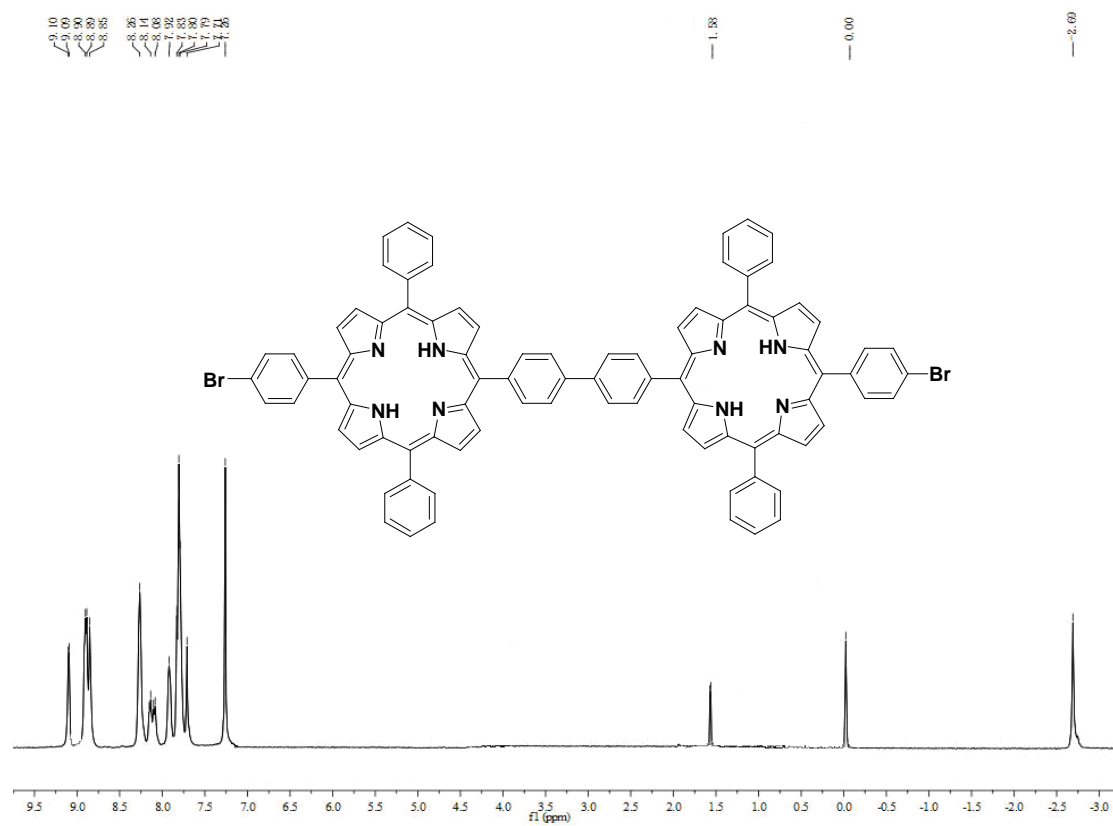
<sup>1</sup>H NMR spectrum of compound **3l**.



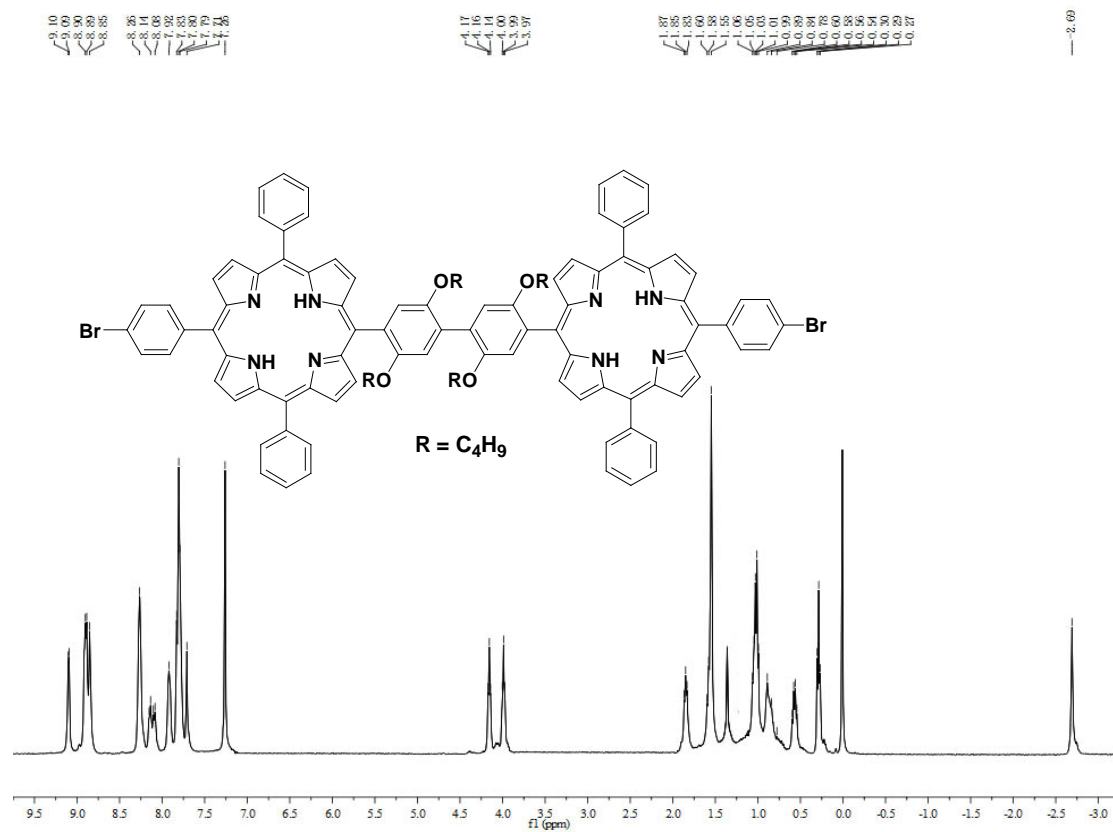




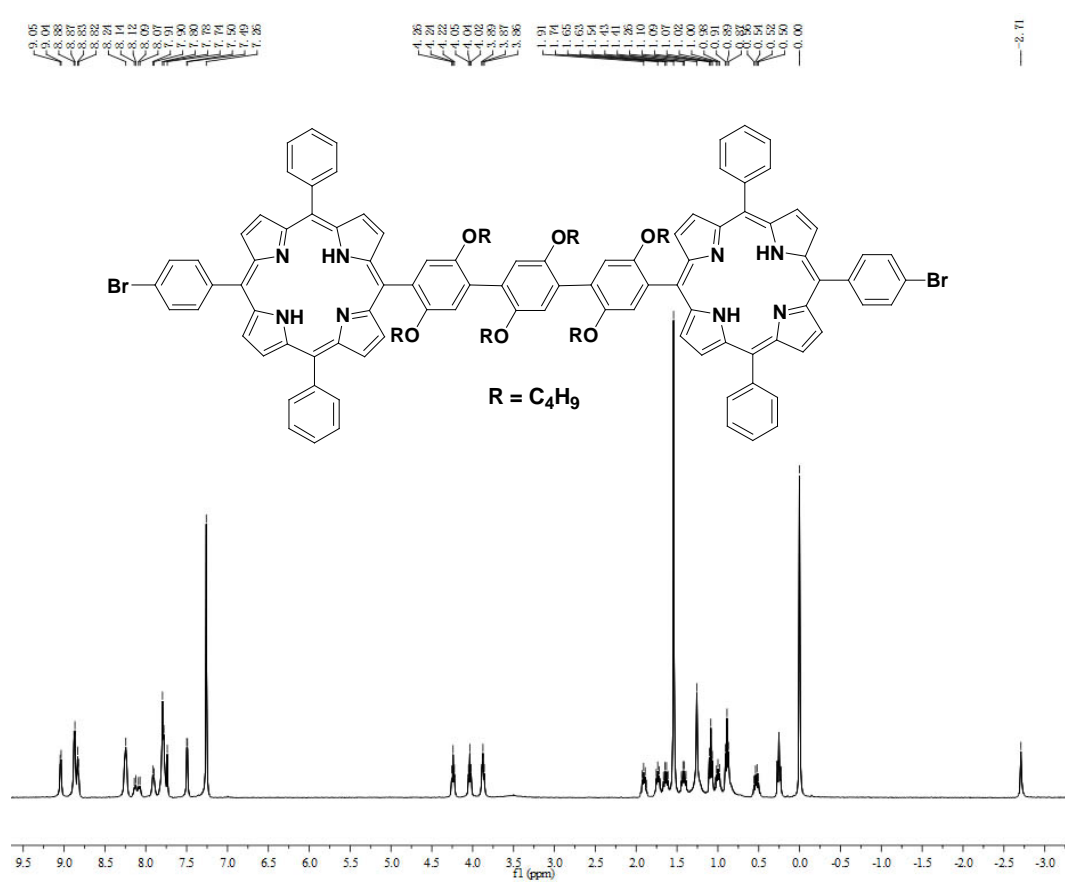
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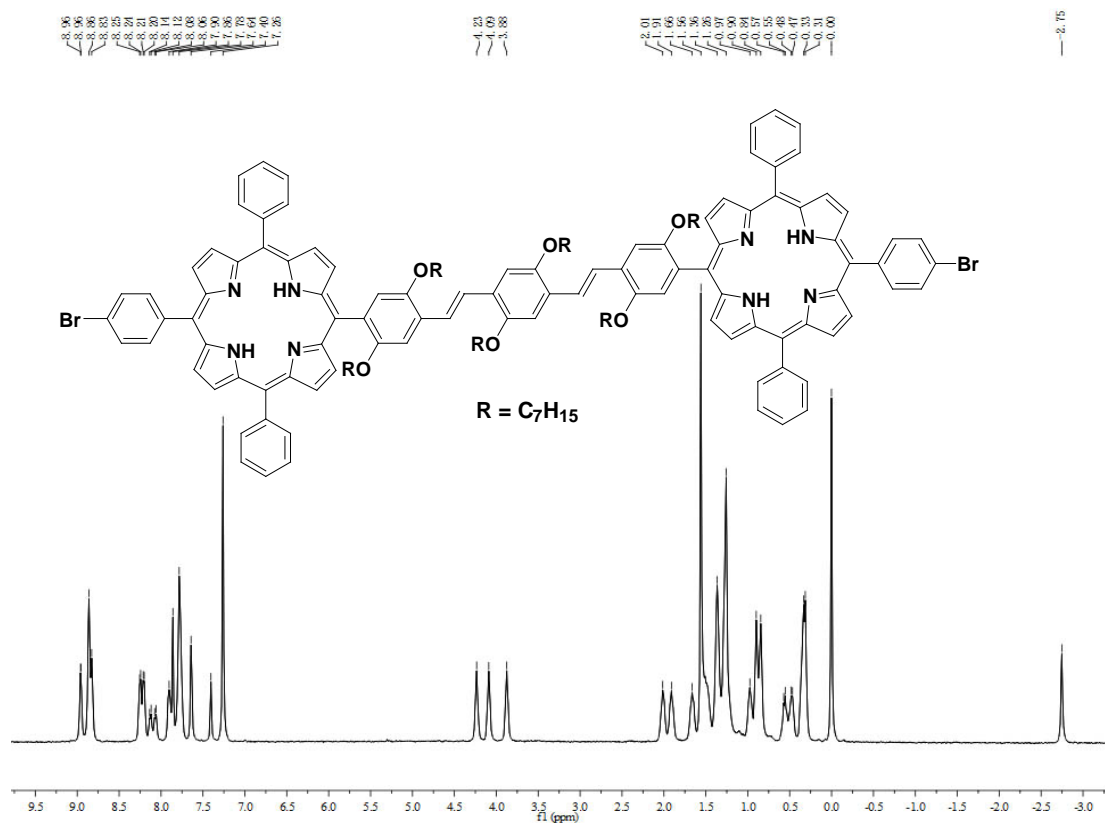
<sup>1</sup>H NMR spectrum of compound **PDd**.



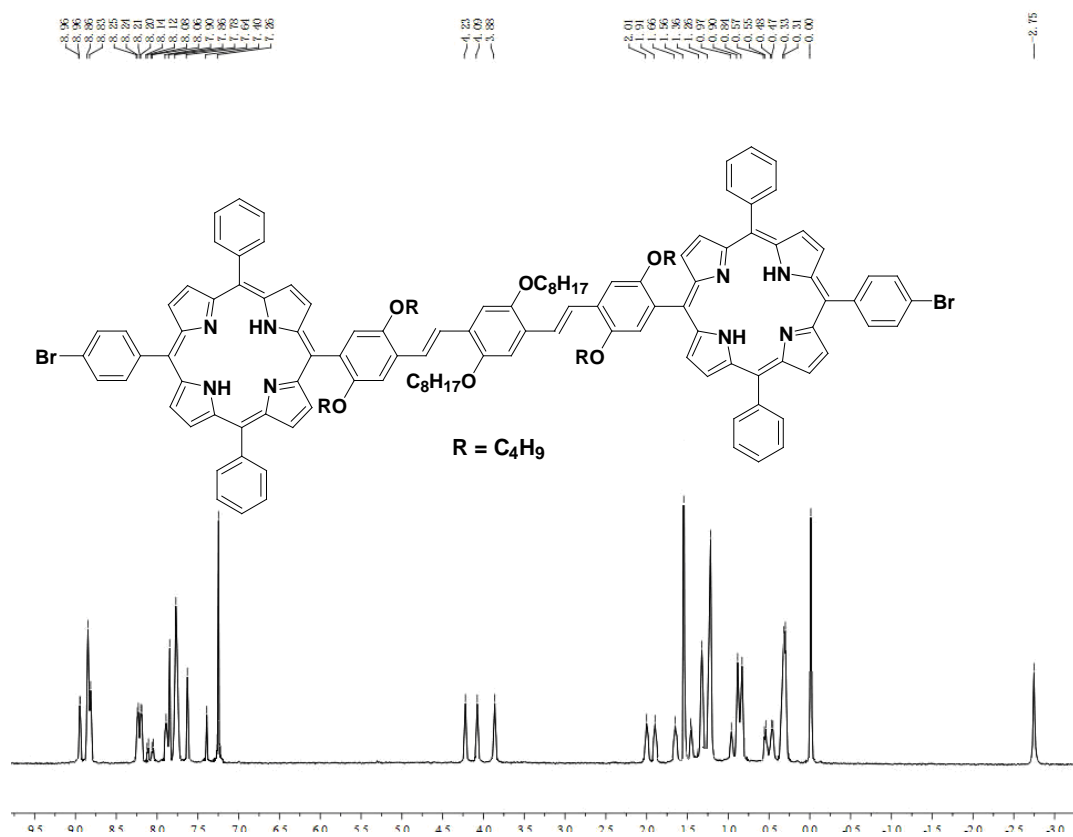
$^1\text{H}$  NMR spectrum of compound **PDe**.



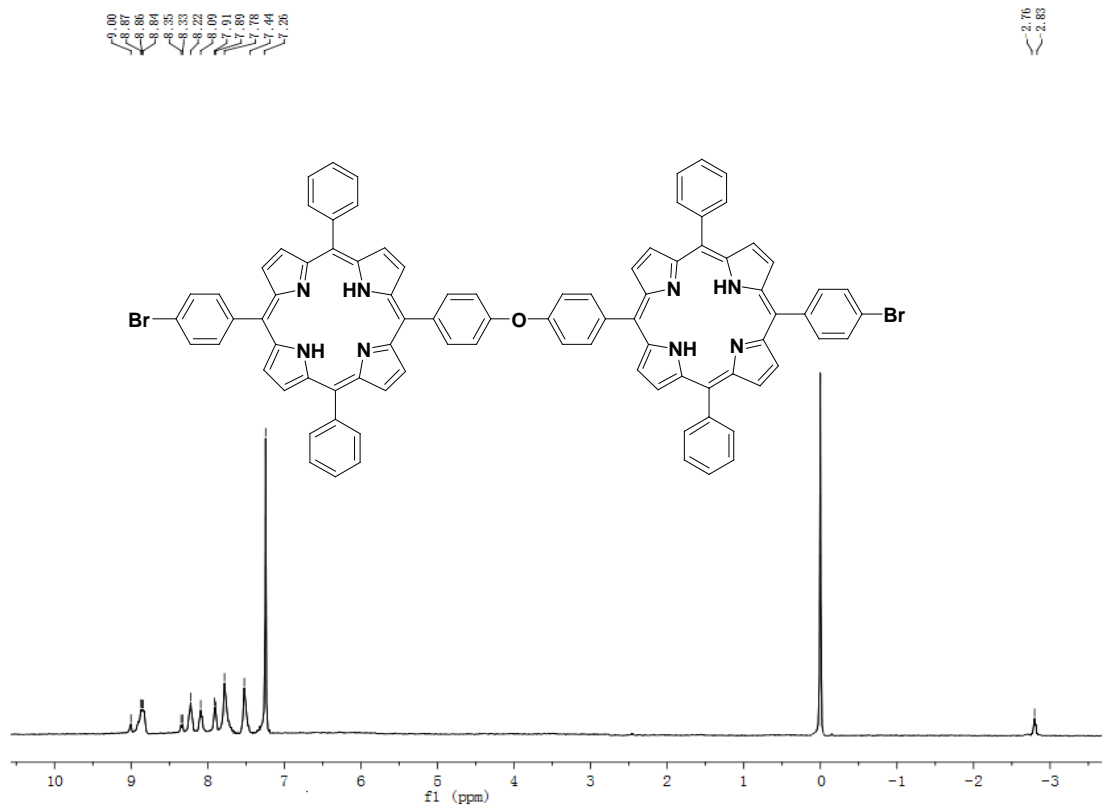
$^1\text{H}$  NMR spectrum of compound **PDF**.



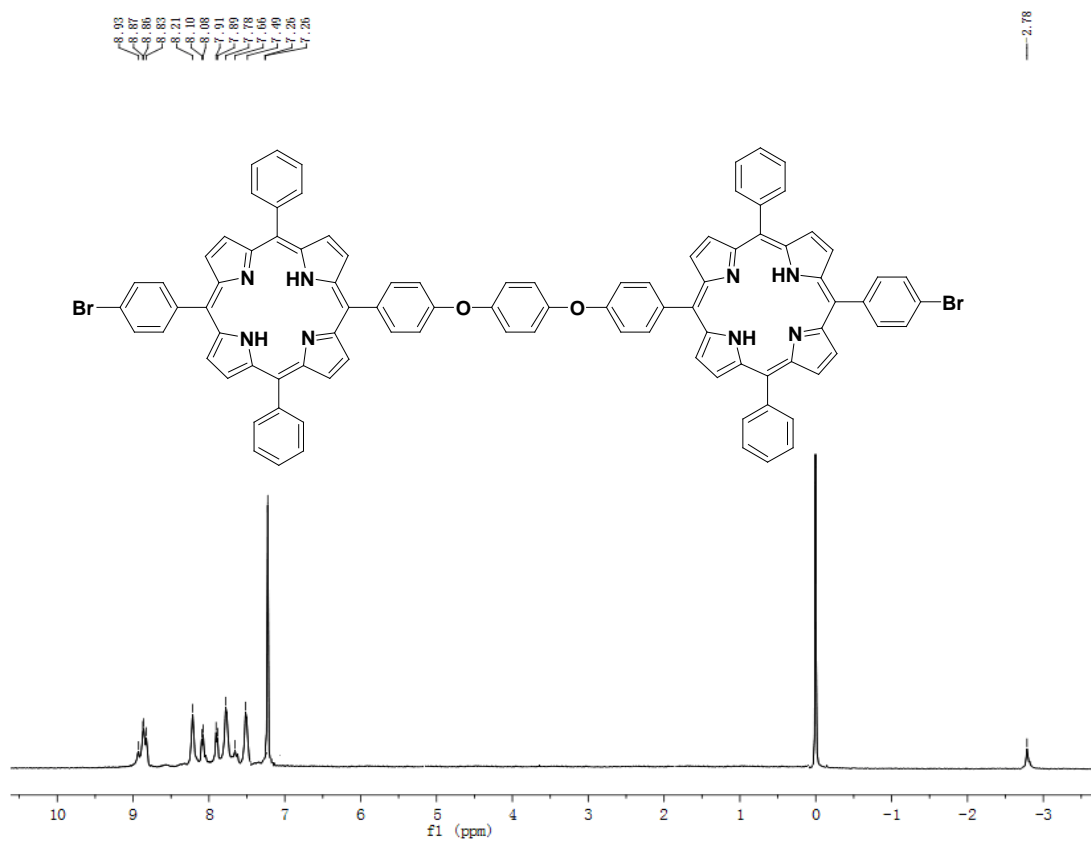
<sup>1</sup>H NMR spectrum of compound **PDg**.



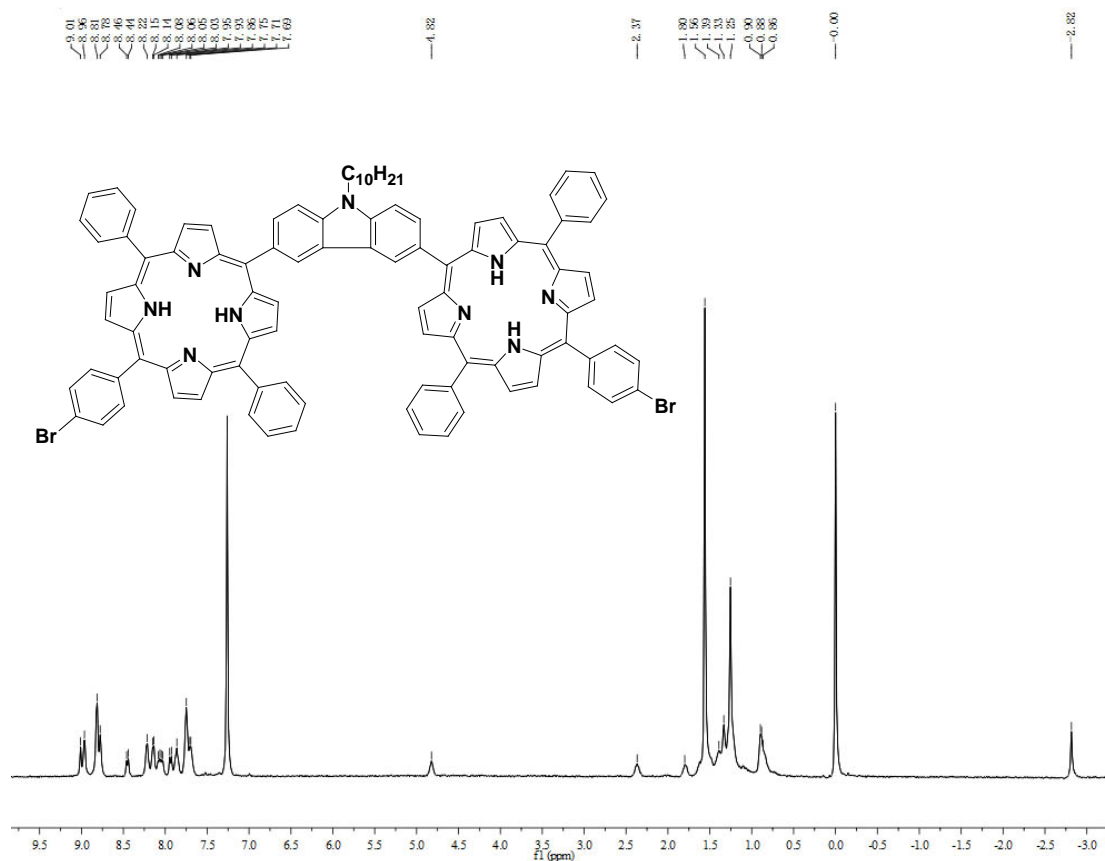
<sup>1</sup>H NMR spectrum of compound **PDh**.



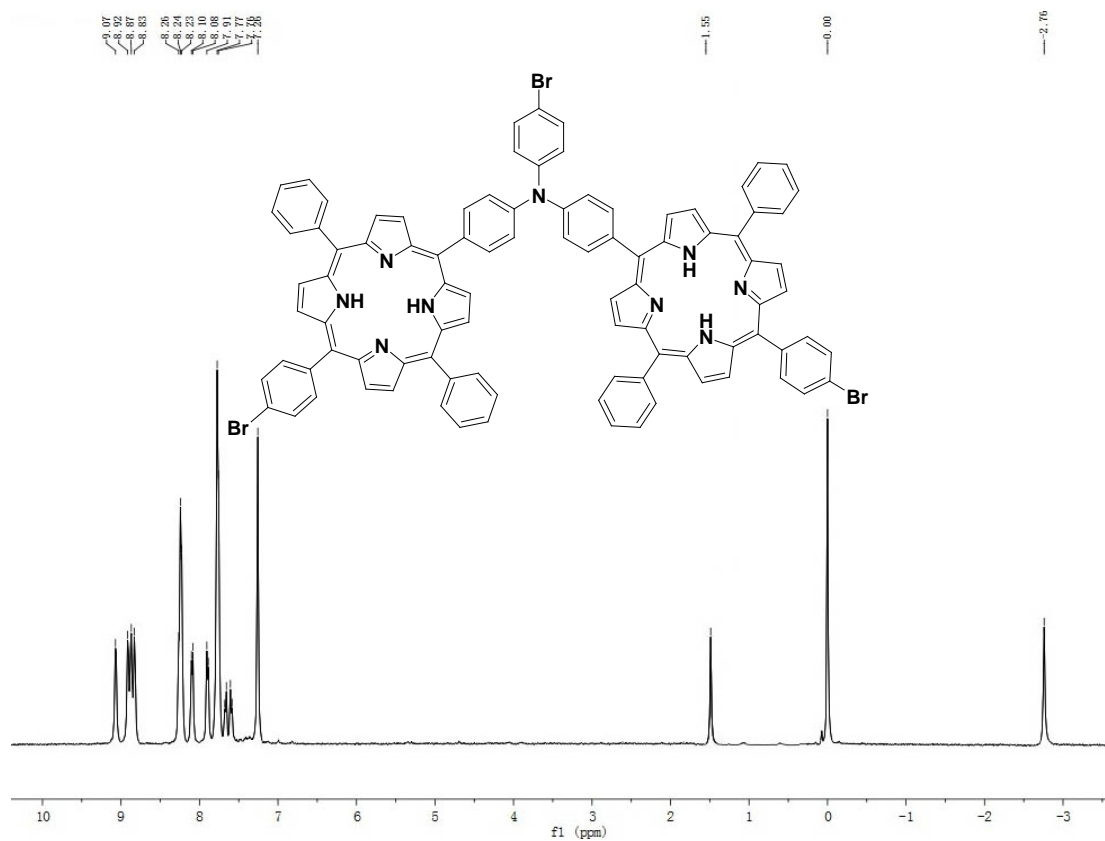
$^1\text{H}$  NMR spectrum of compound **PDi**.



$^1\text{H}$  NMR spectrum of compound **PDj**.



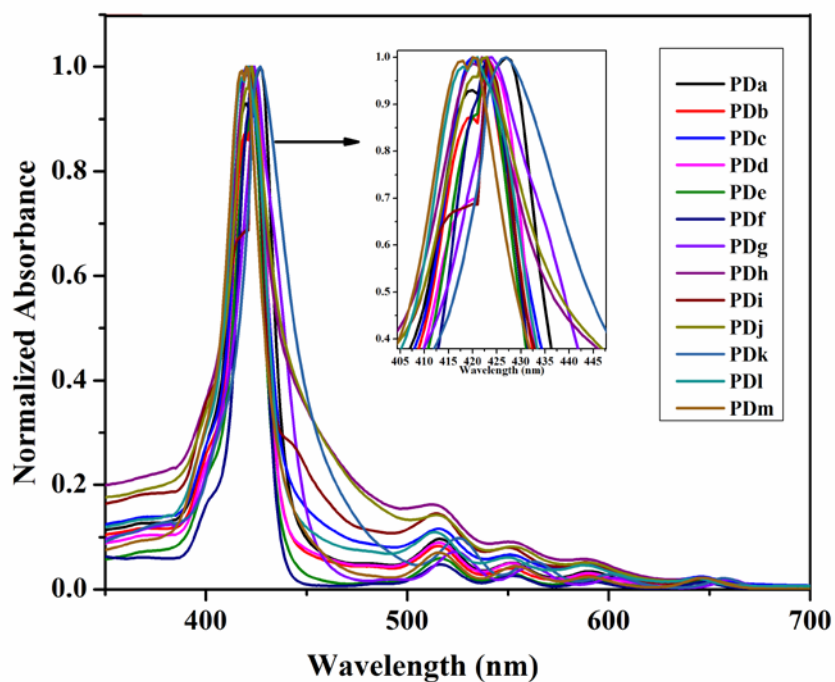
<sup>1</sup>H NMR spectrum of compound **PDK**.



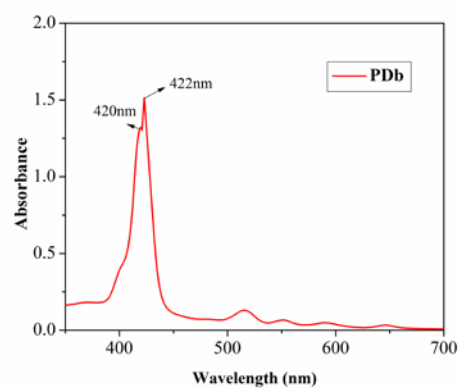
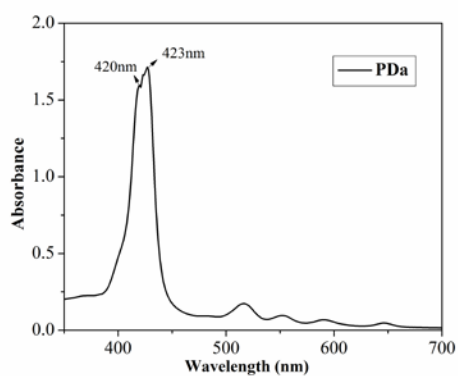
<sup>1</sup>H NMR spectrum of compound **PDI**.



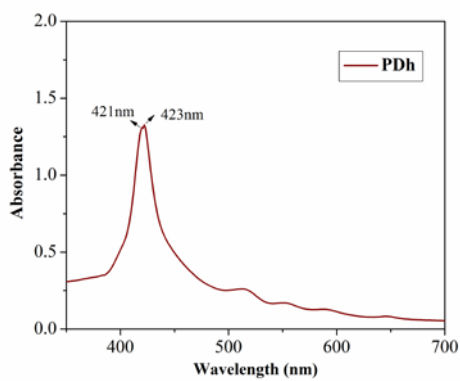
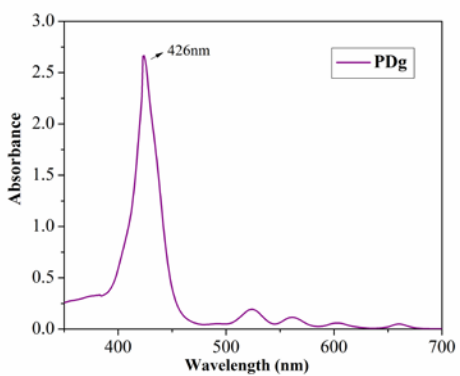
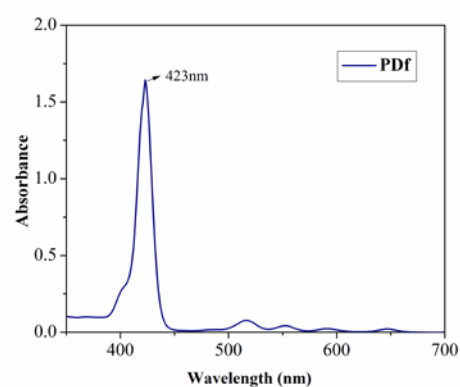
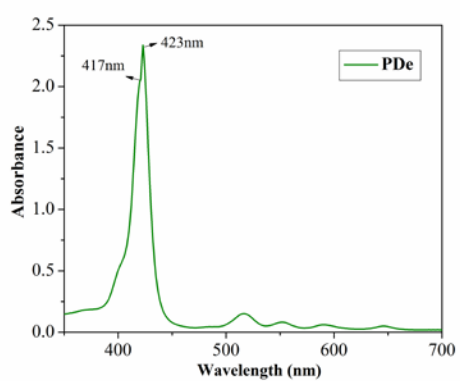
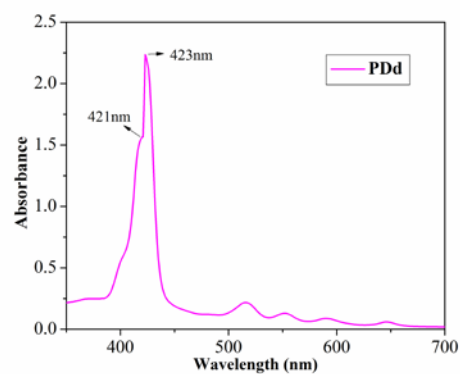
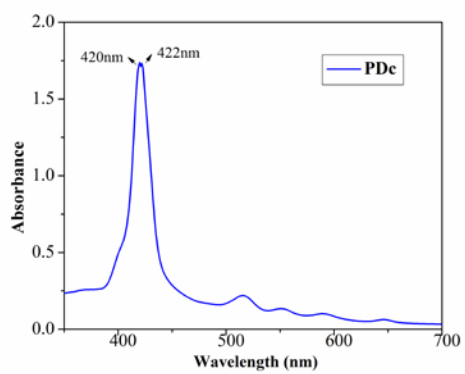
## Absorption Spectra

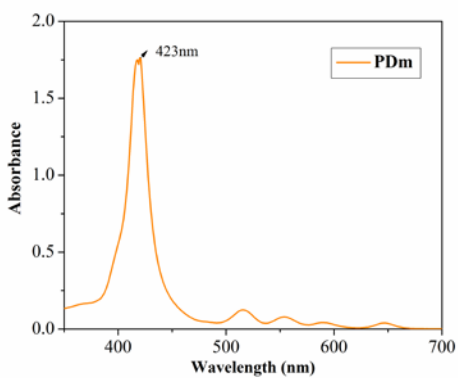
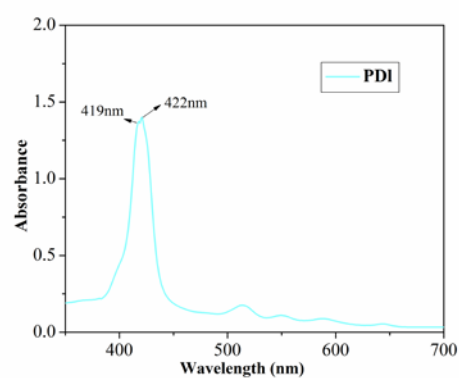
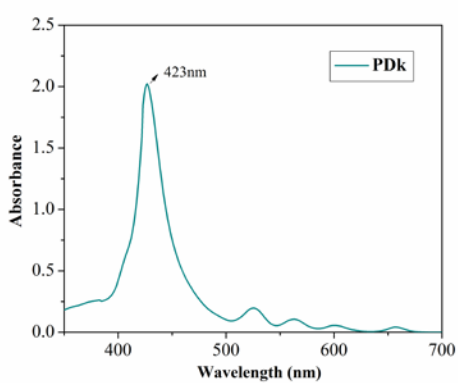
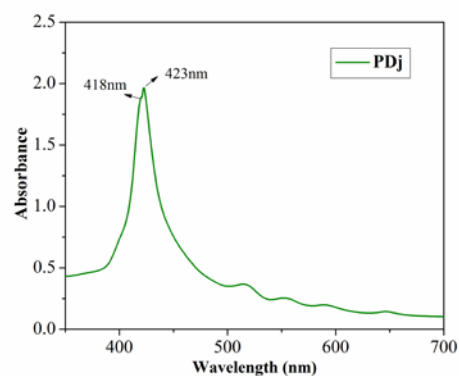
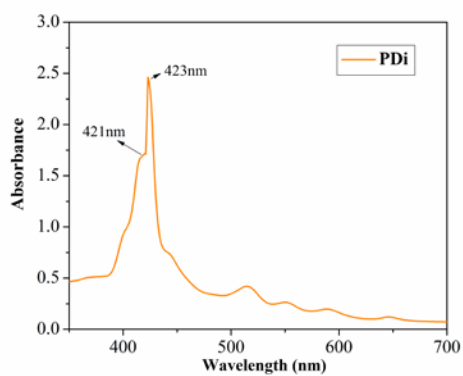


Normalised absorption spectra of the obtained porphyrin dimers at identical concentrations in a  $\text{CH}_2\text{Cl}_2$  solution.









Absorption spectra of the each obtained porphyrin dimers (**PDa-m**) at identical concentrations in a  $\text{CH}_2\text{Cl}_2$  solution ( $c=1 \times 10^{-5}$  mol/L).