

## **Supporting information**

### **A naked-eye selective detection of cyanide ion: Studies on the effect of chromophores and spacers on ditopic receptors**

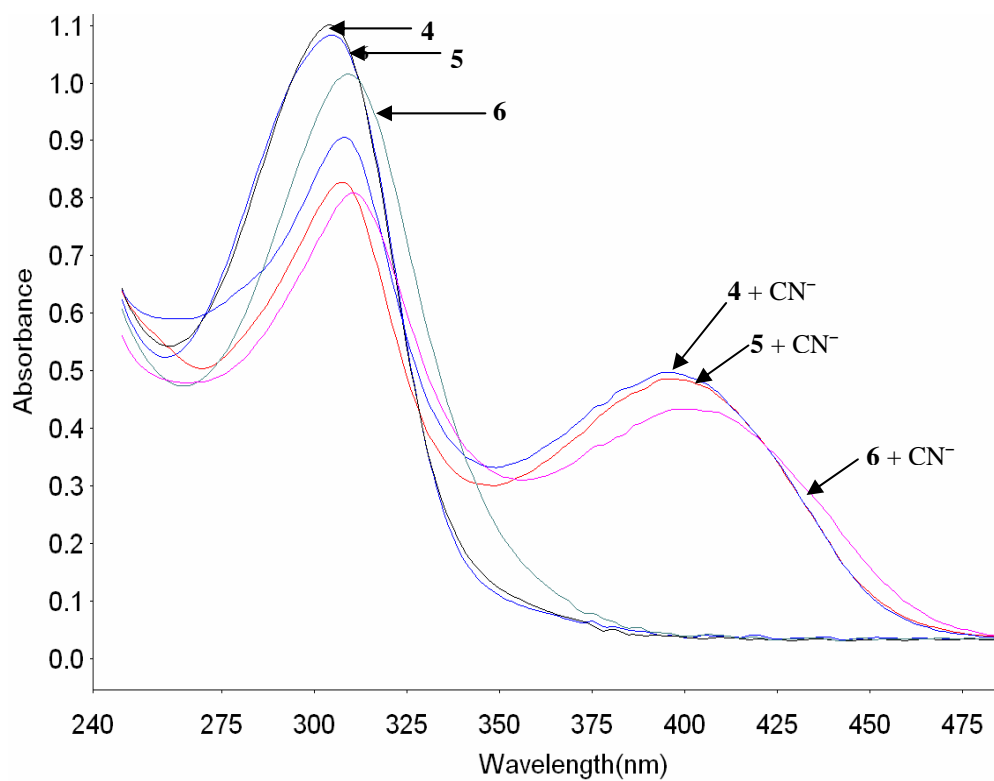
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474002, India

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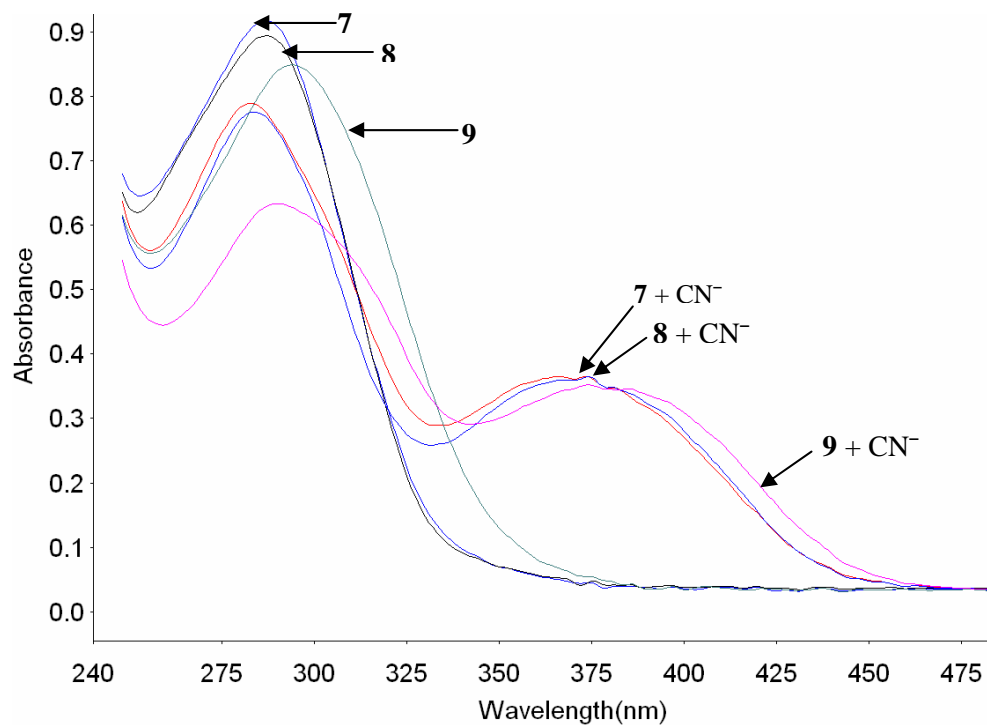
## 6. UV-vis spectra of 4, 5, and 6 with TBA-CN

Absorption spectra of **4**, **5**, and **6** ( $1.8 \times 10^{-5}$  M) with the 5.0 equiv. of TBA-CN, in THF-DMSO (99:1, v/v).

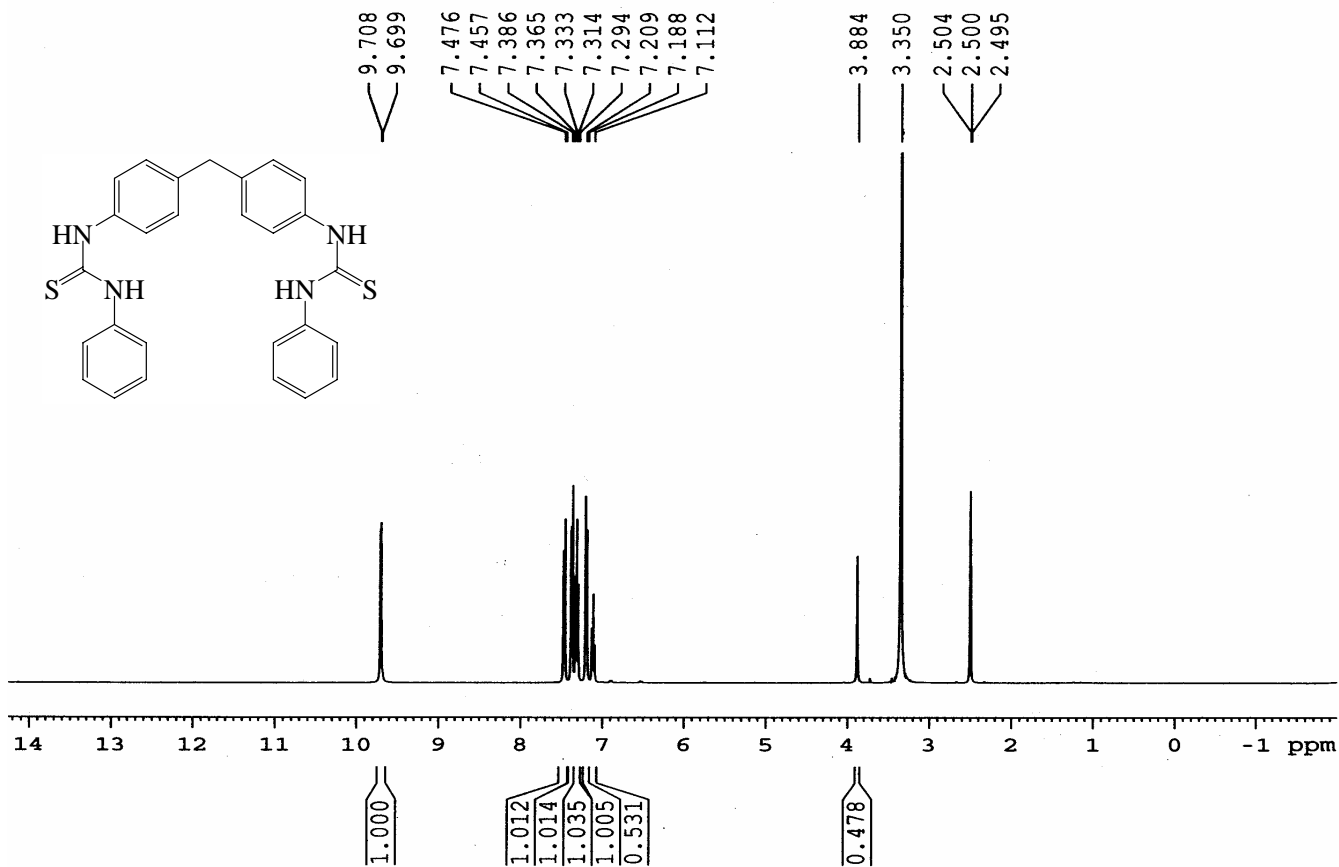


## 8. UV-vis spectra of 7, 8, and 9 with TBA-CN

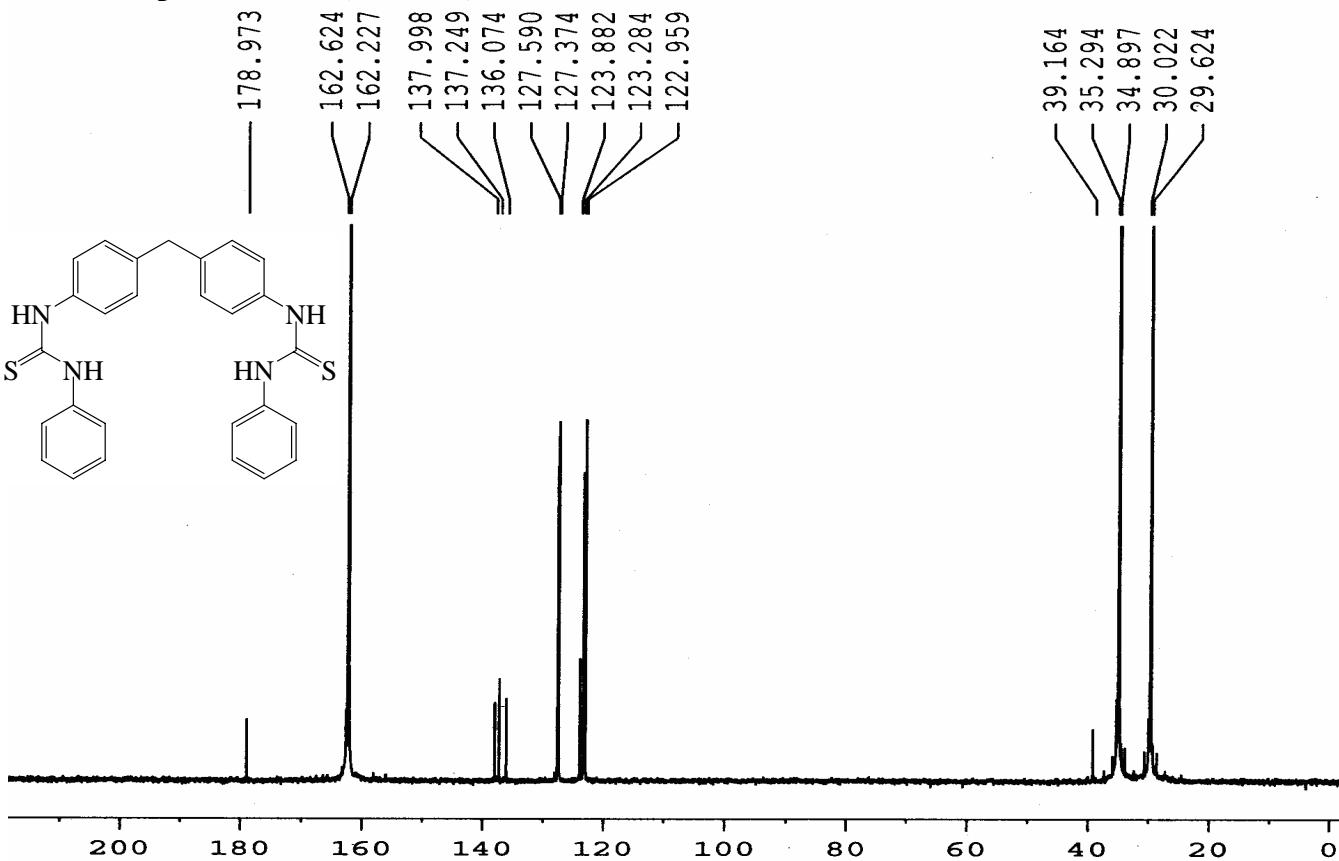
Absorption spectra of **7**, **8**, and **9** ( $1.8 \times 10^{-5}$  M) with the 5.0 equiv. of TBA-CN, in THF-DMSO (99:1, v/v).



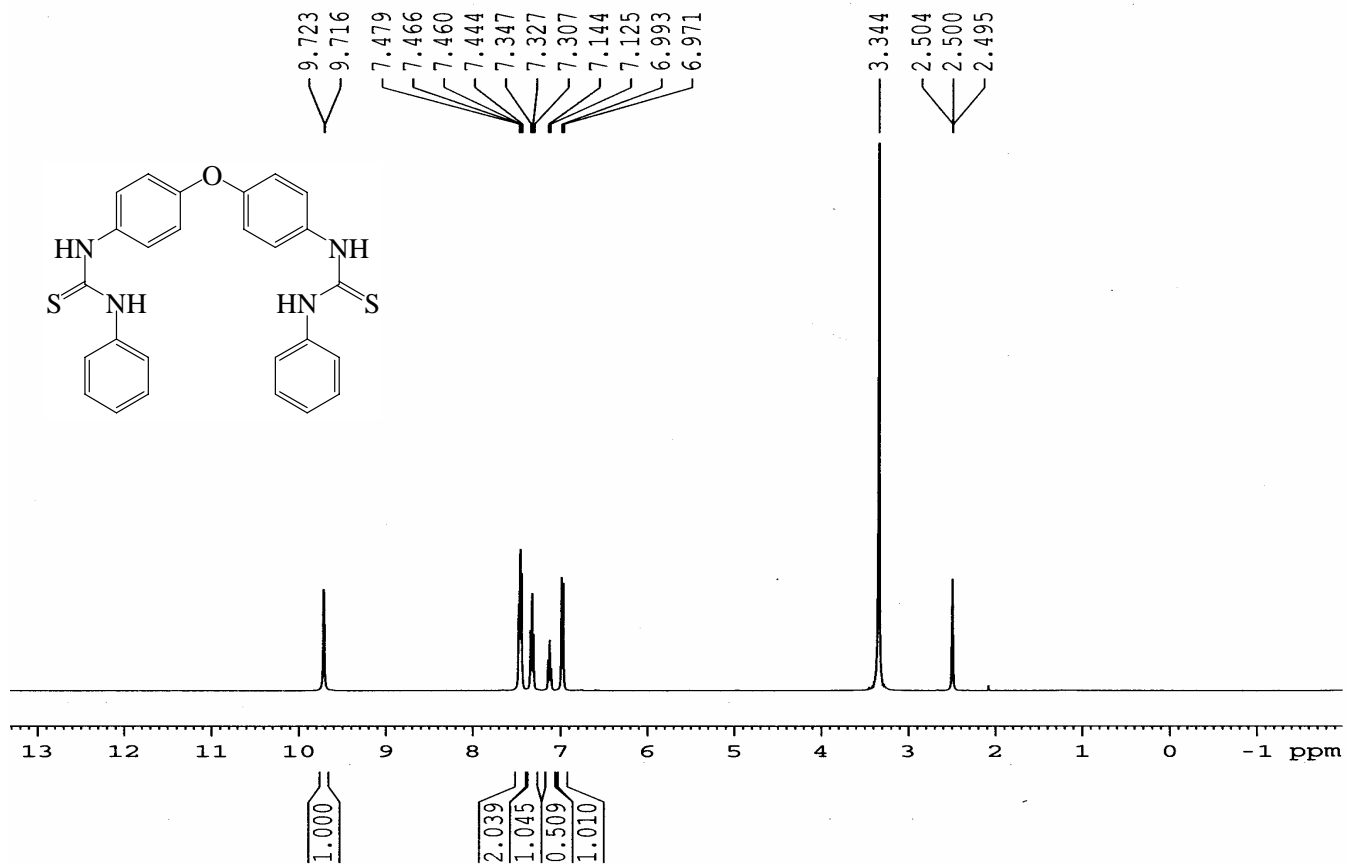
$^1\text{H}$  NMR spectrum of **1** (DMSO- $d_6$ )



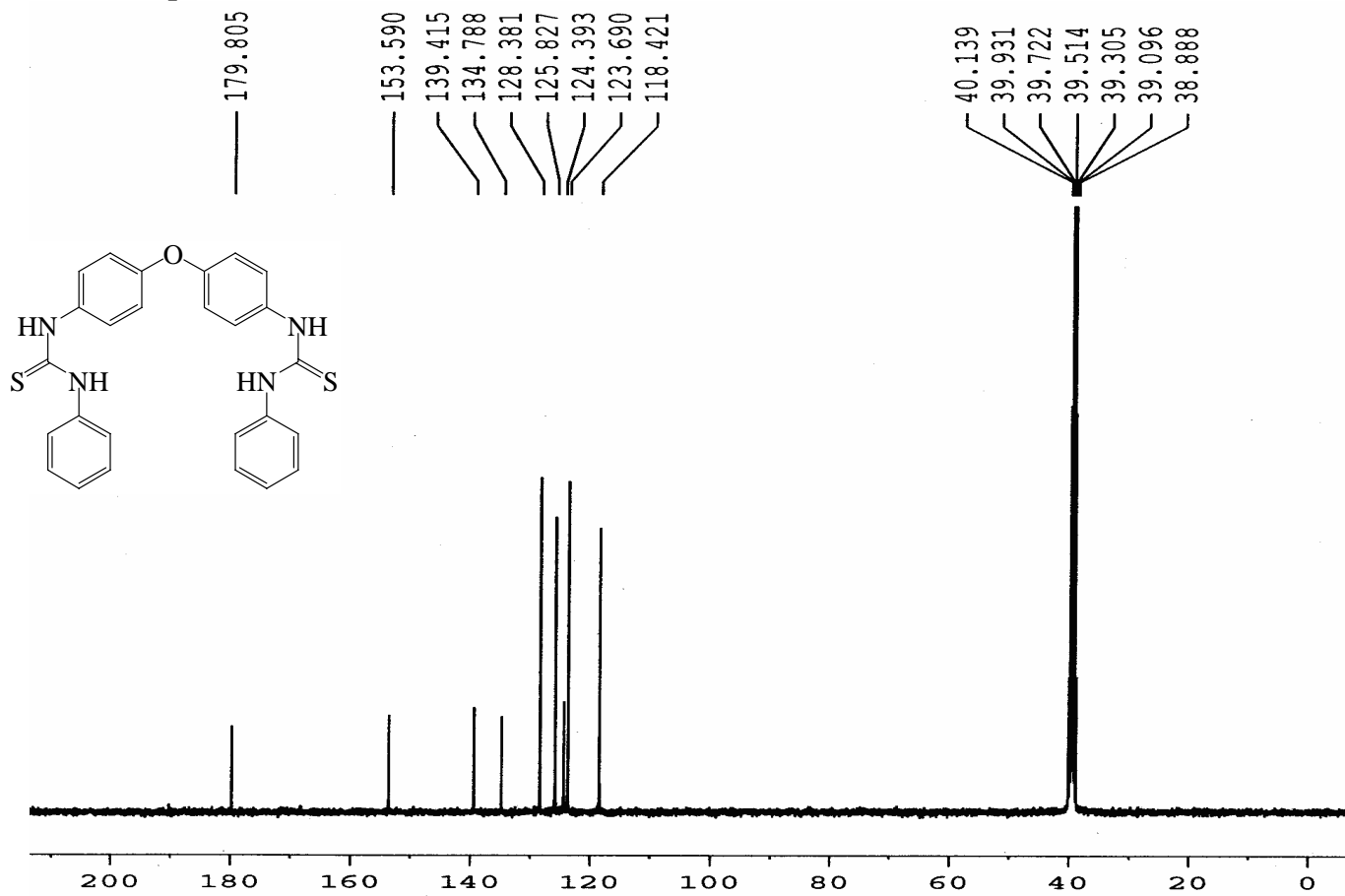
**<sup>13</sup>C NMR spectrum of 1 (DMF-d6)**



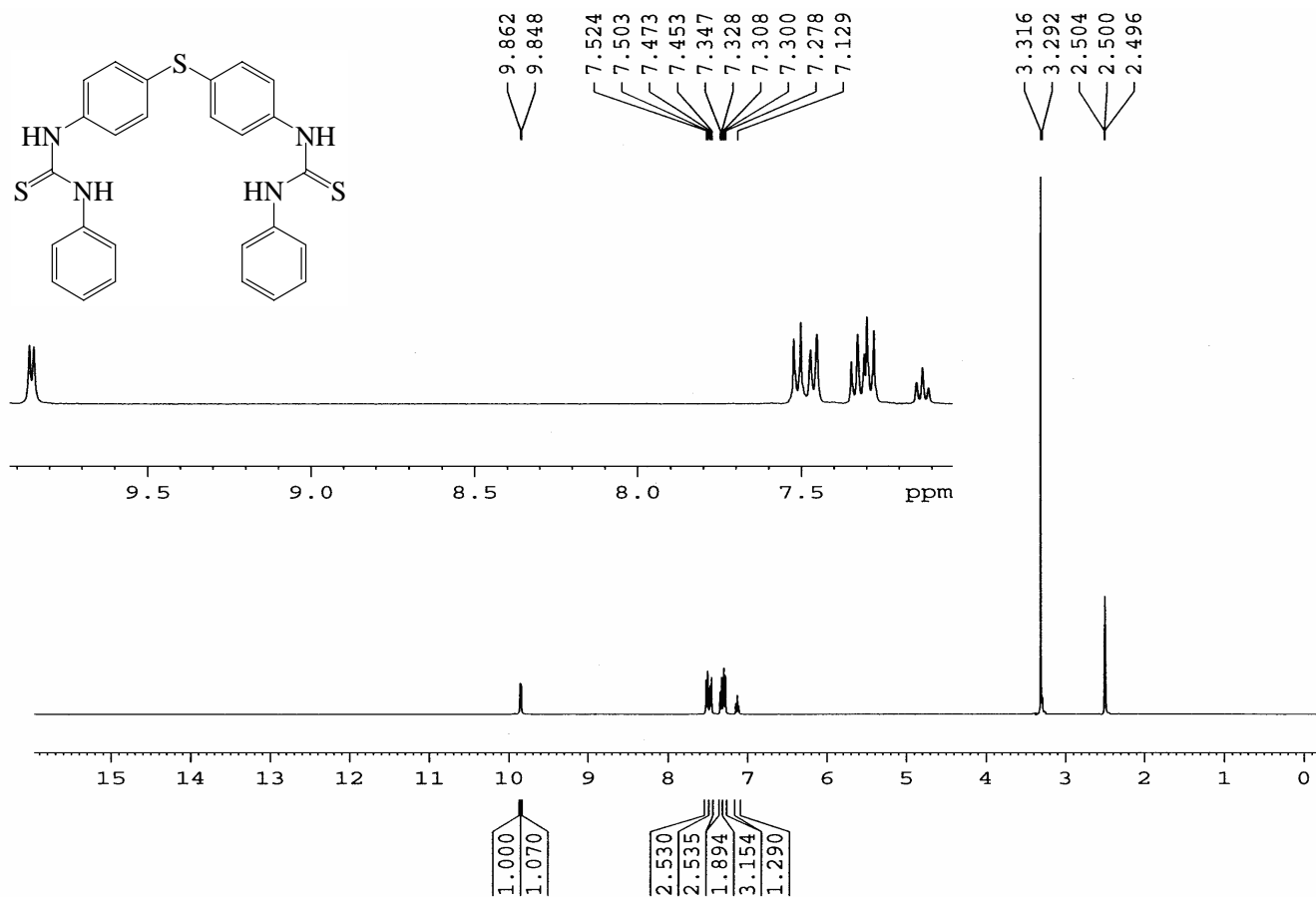
**<sup>1</sup>H NMR spectrum of 2 (DMSO-d6)**



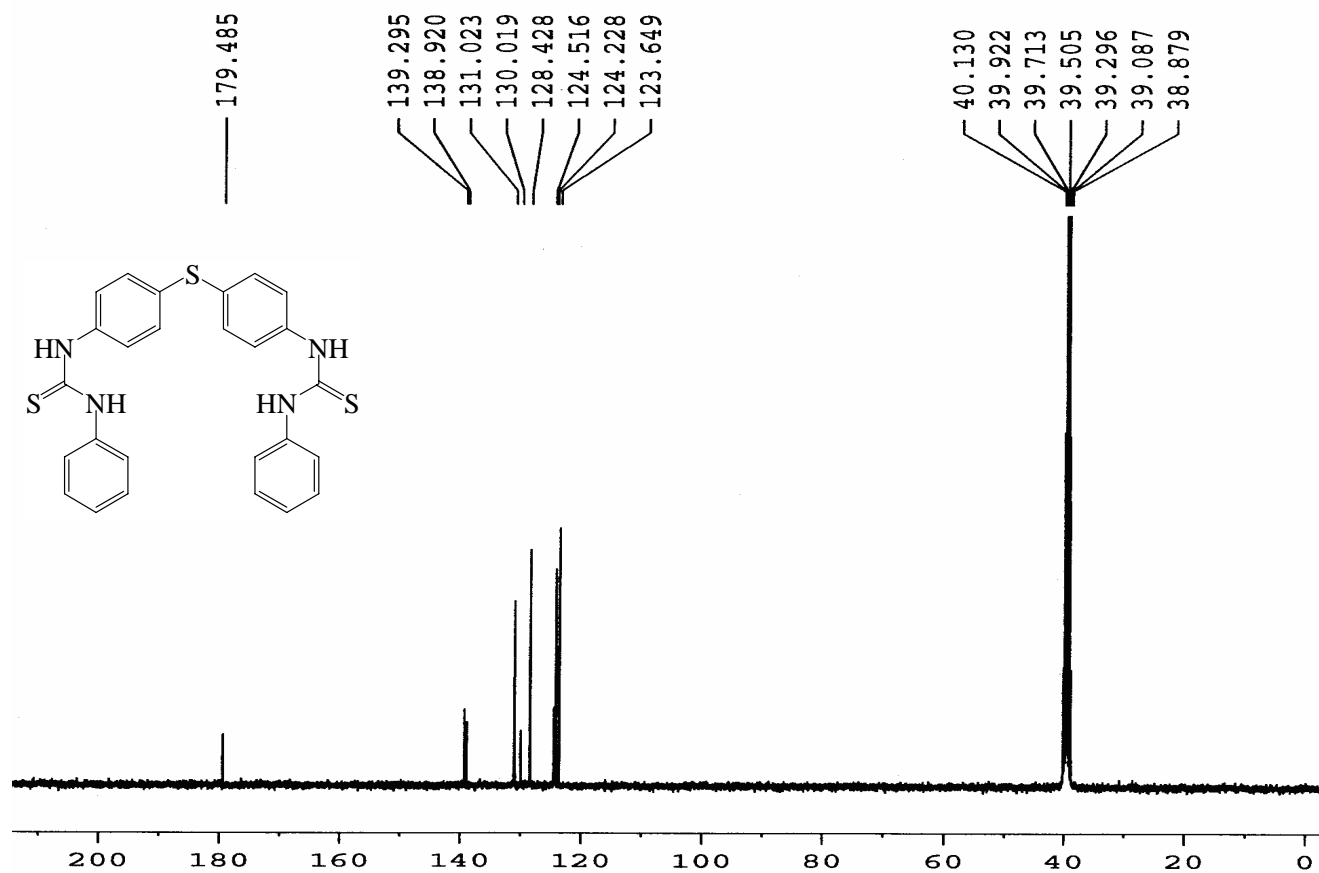
**<sup>1</sup>H NMR spectrum of 2 (DMSO-d<sub>6</sub>)**



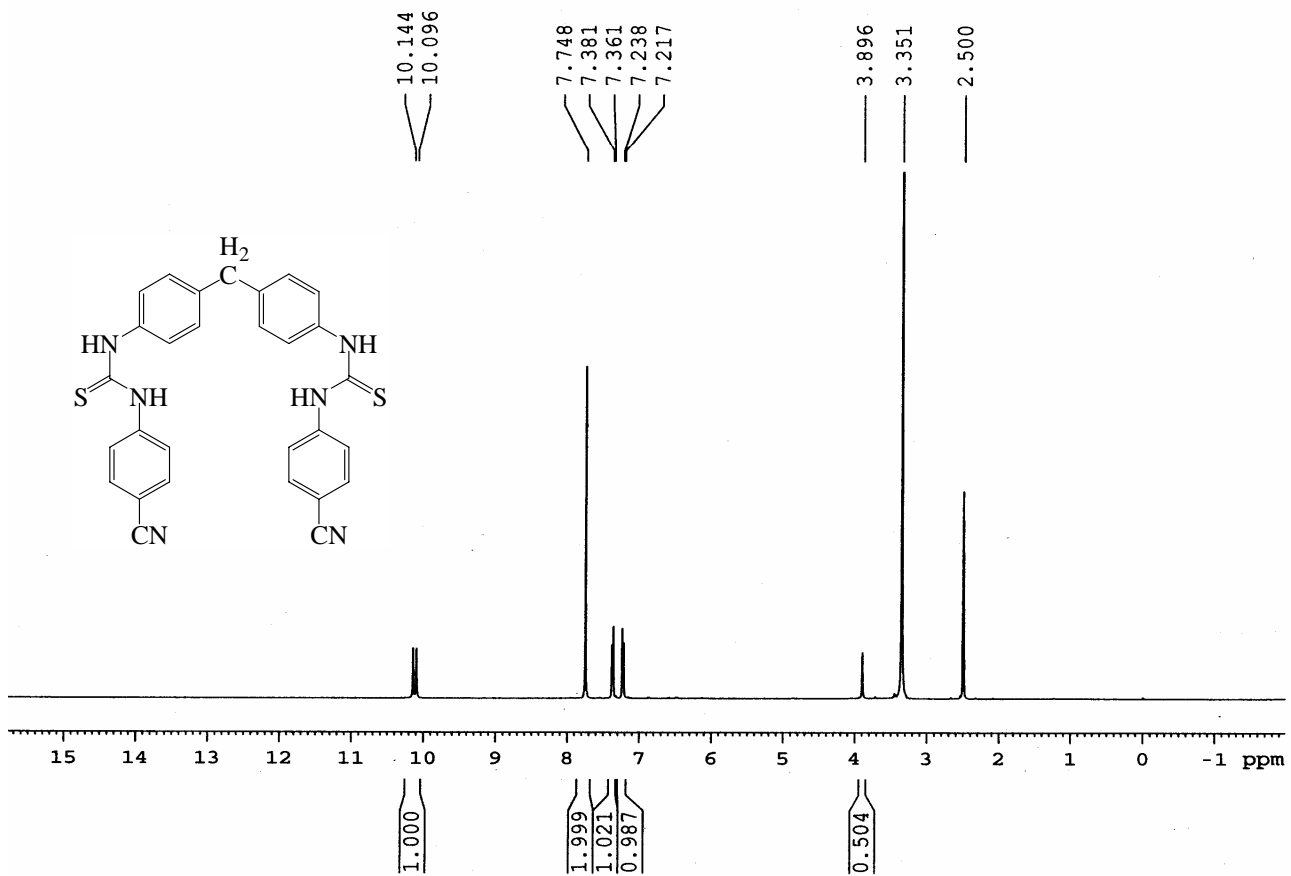
**<sup>13</sup>C NMR spectrum of 3 (DMSO-d<sub>6</sub>)**



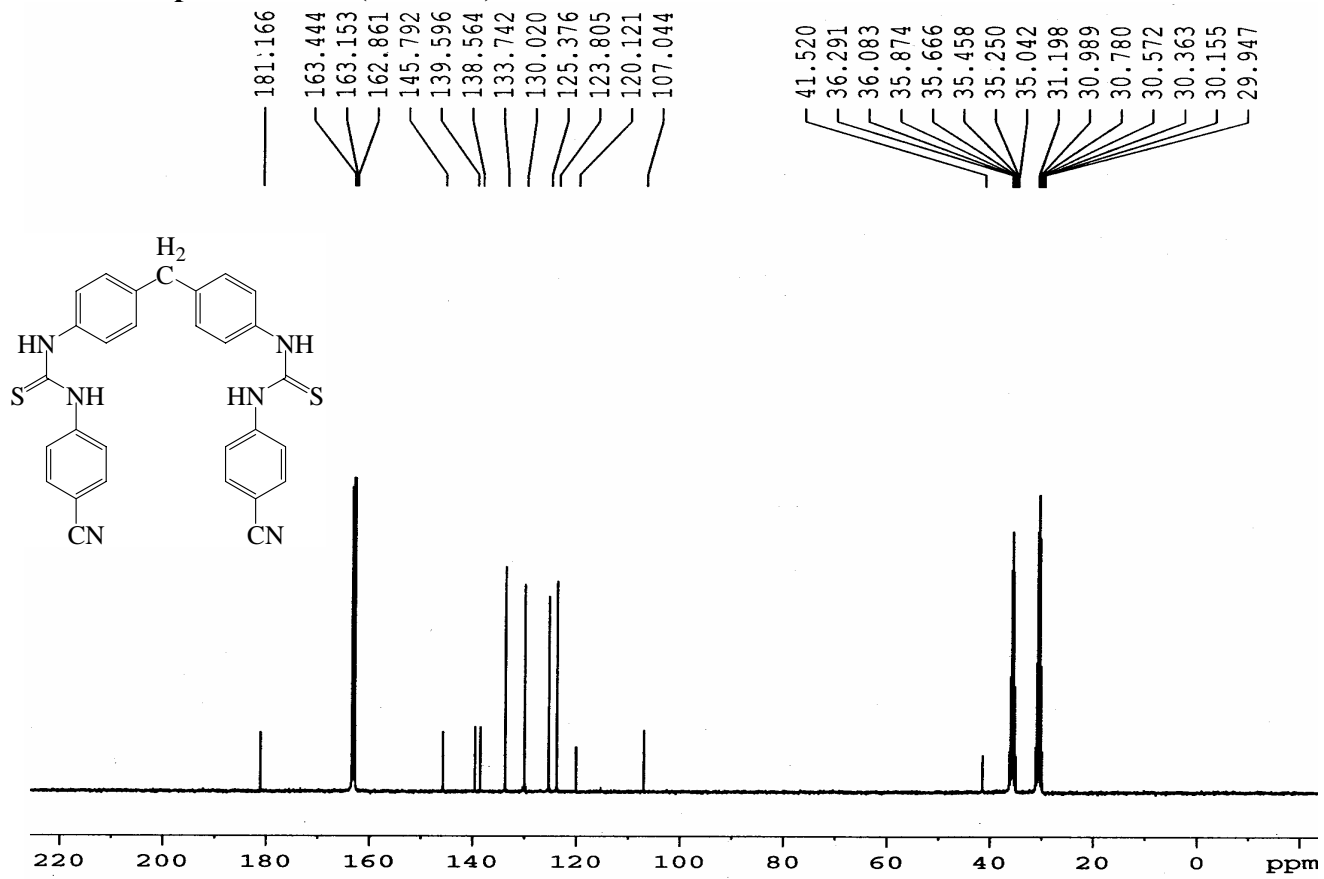
**<sup>13</sup>C NMR spectrum of 3 (DMSO-d<sub>6</sub>)**



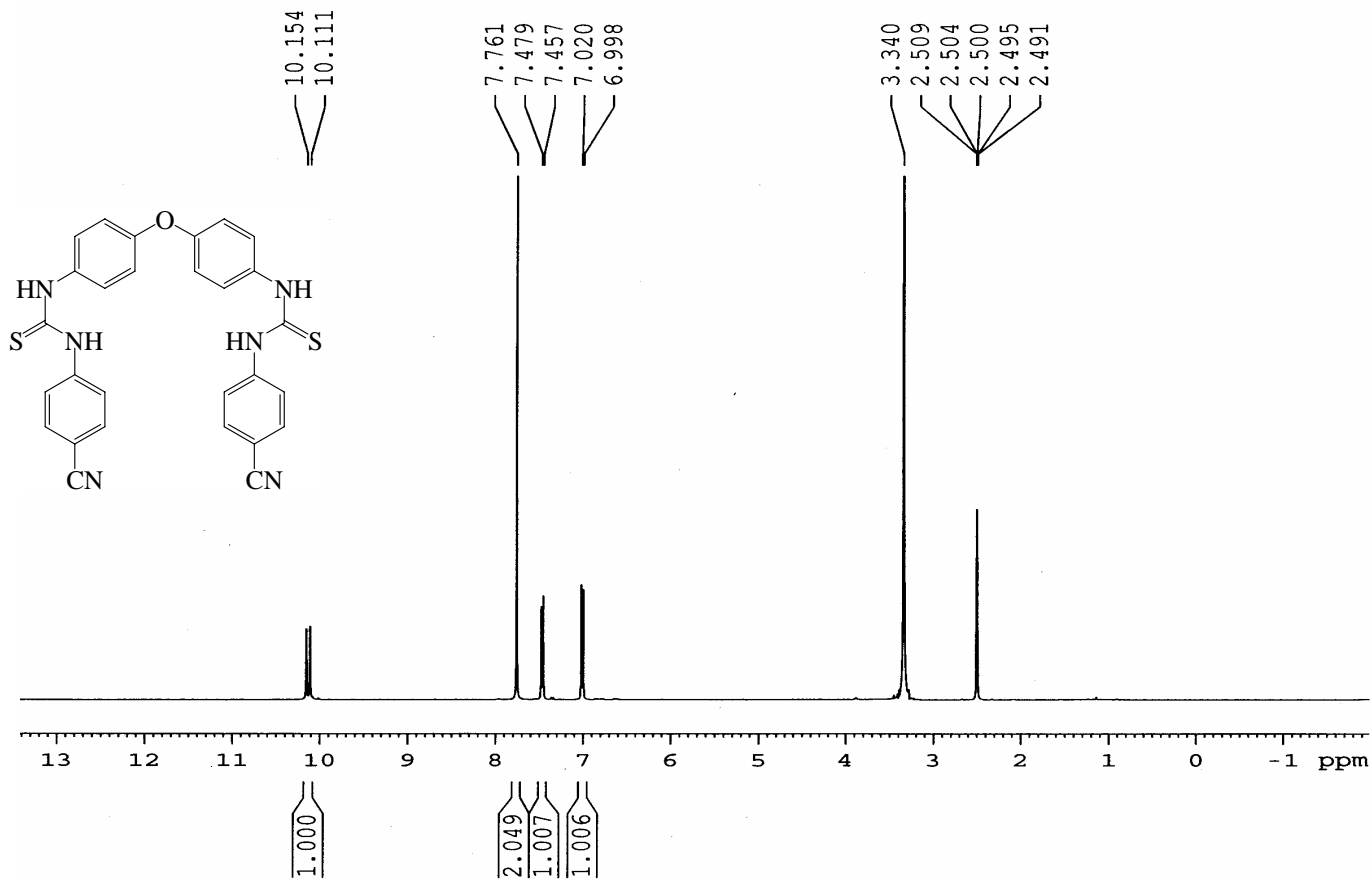
**<sup>1</sup>H NMR spectrum of 4 (DMSO-d<sub>6</sub>)**



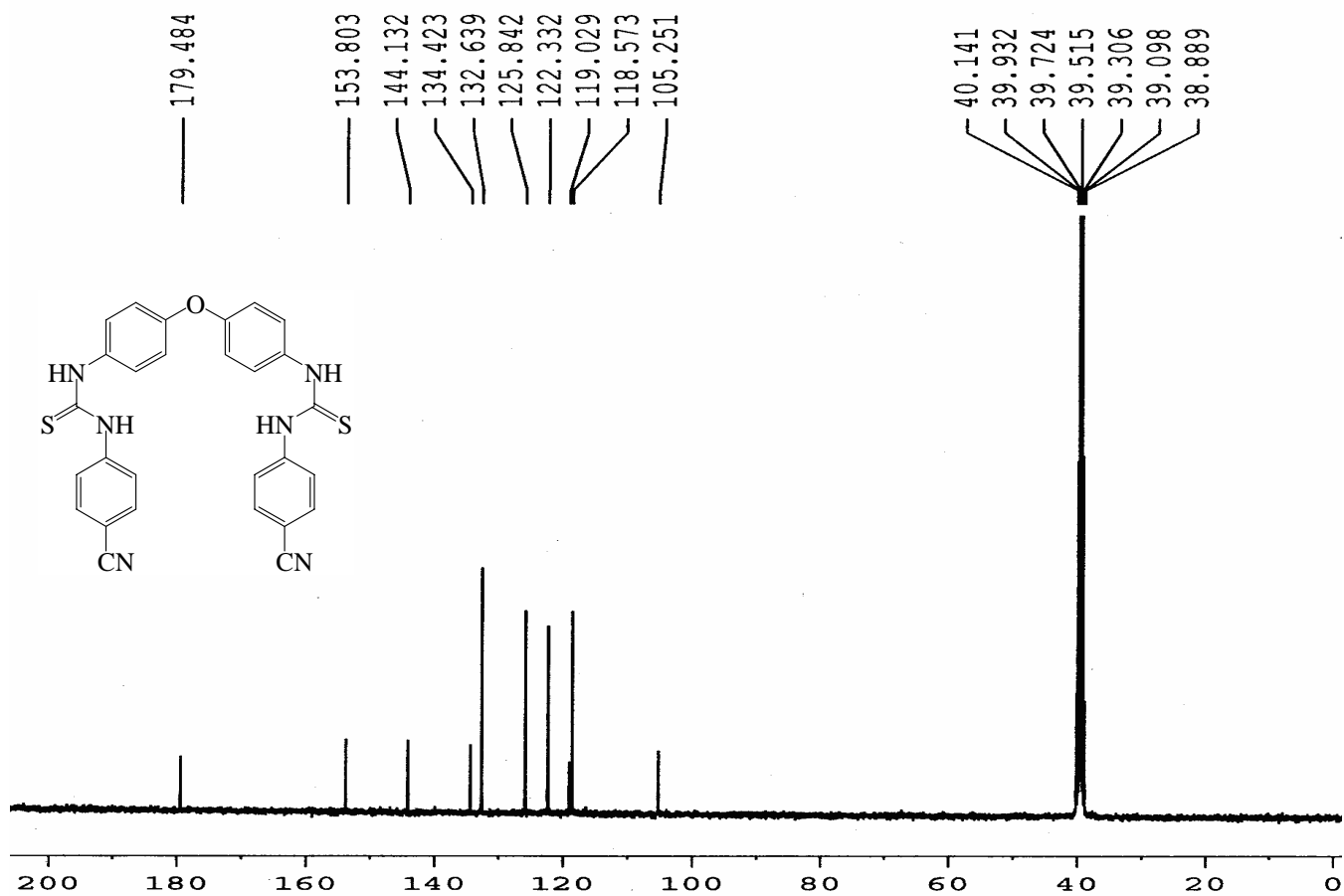
**<sup>13</sup>C NMR spectrum of 4 (DMF-d<sub>6</sub>)**



**<sup>1</sup>H NMR spectrum of 5 (DMSO-d<sub>6</sub>)**

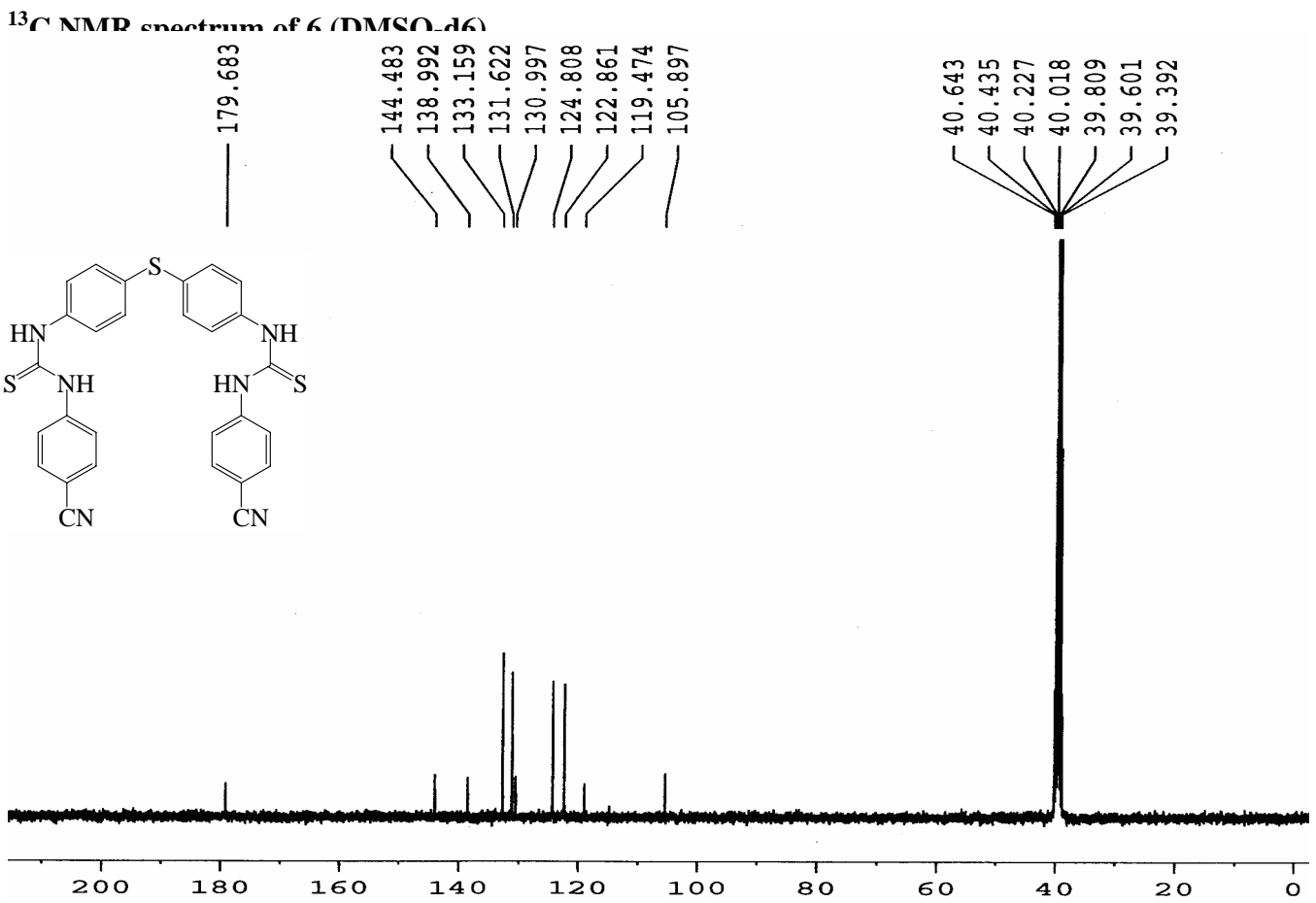
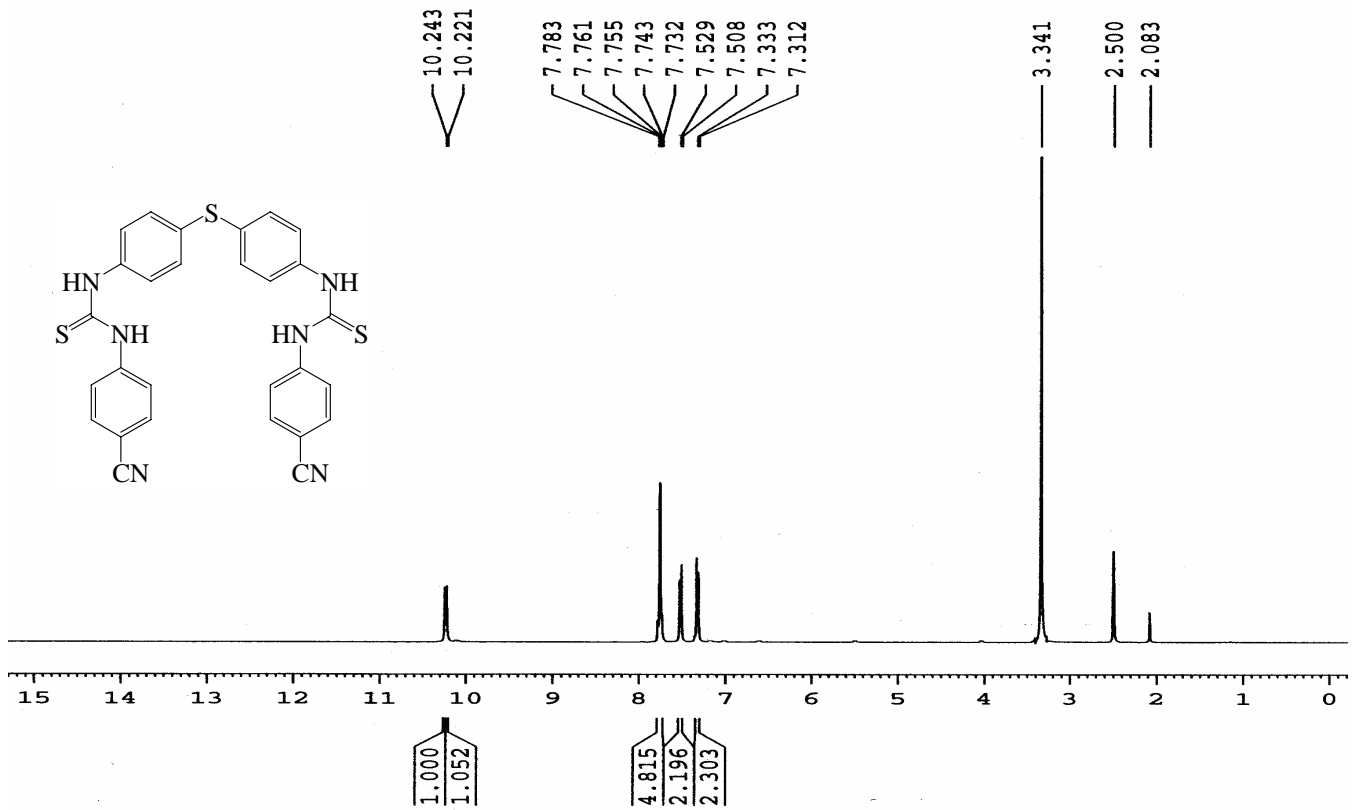


**<sup>13</sup>C NMR spectrum of 5 (DMSO-d<sub>6</sub>)**

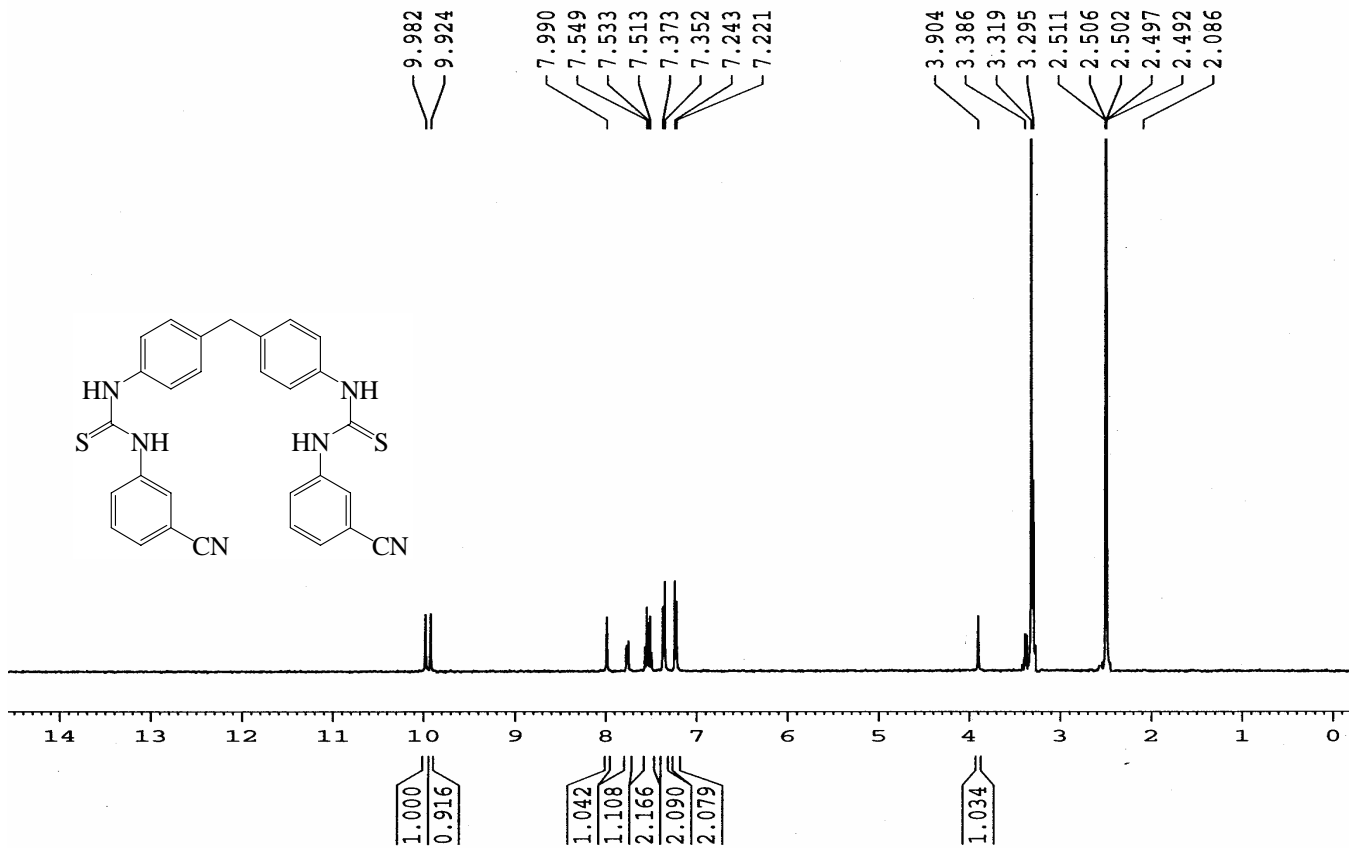


**<sup>13</sup>C NMR spectrum of 6 (DMSO-d<sub>6</sub>)**

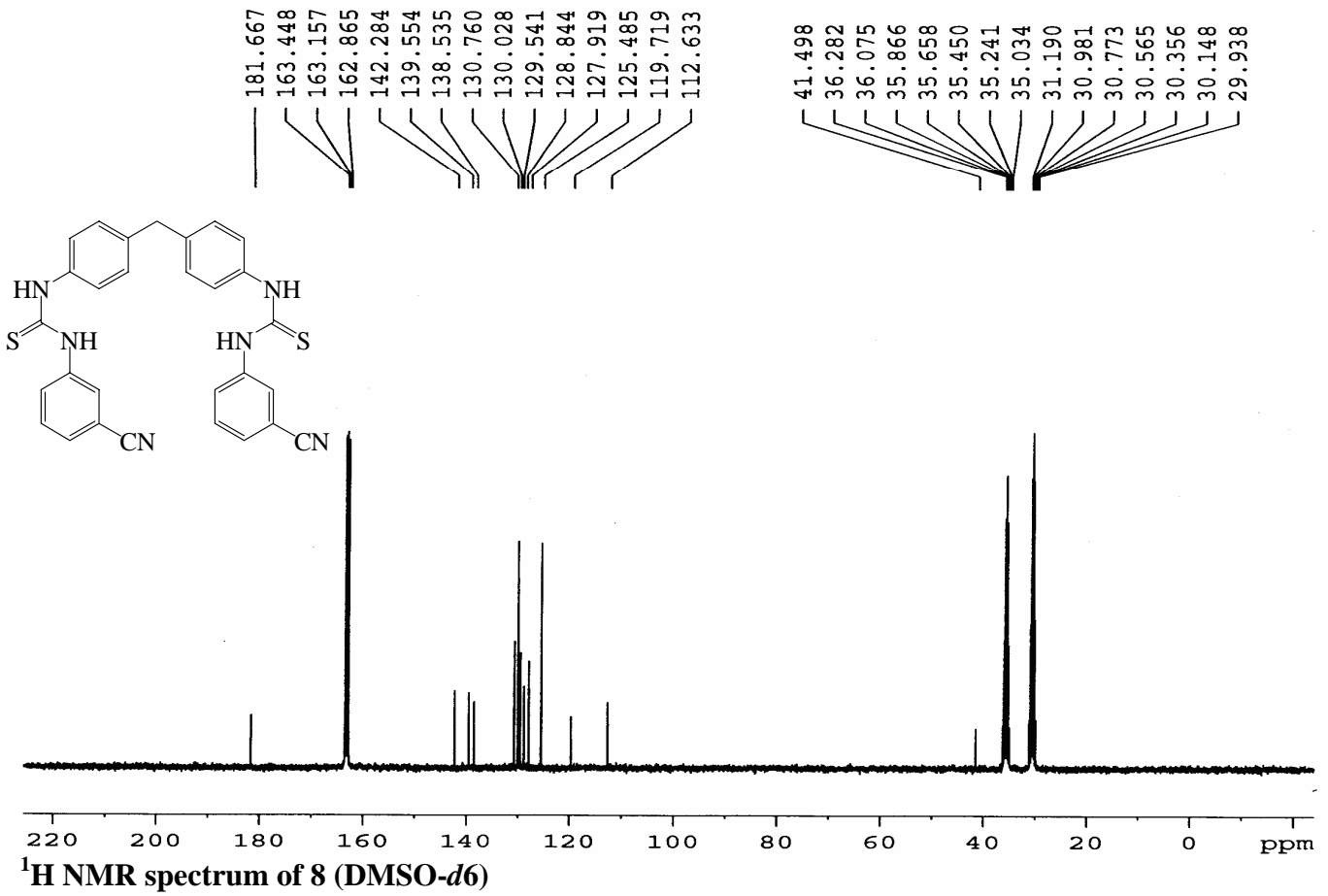


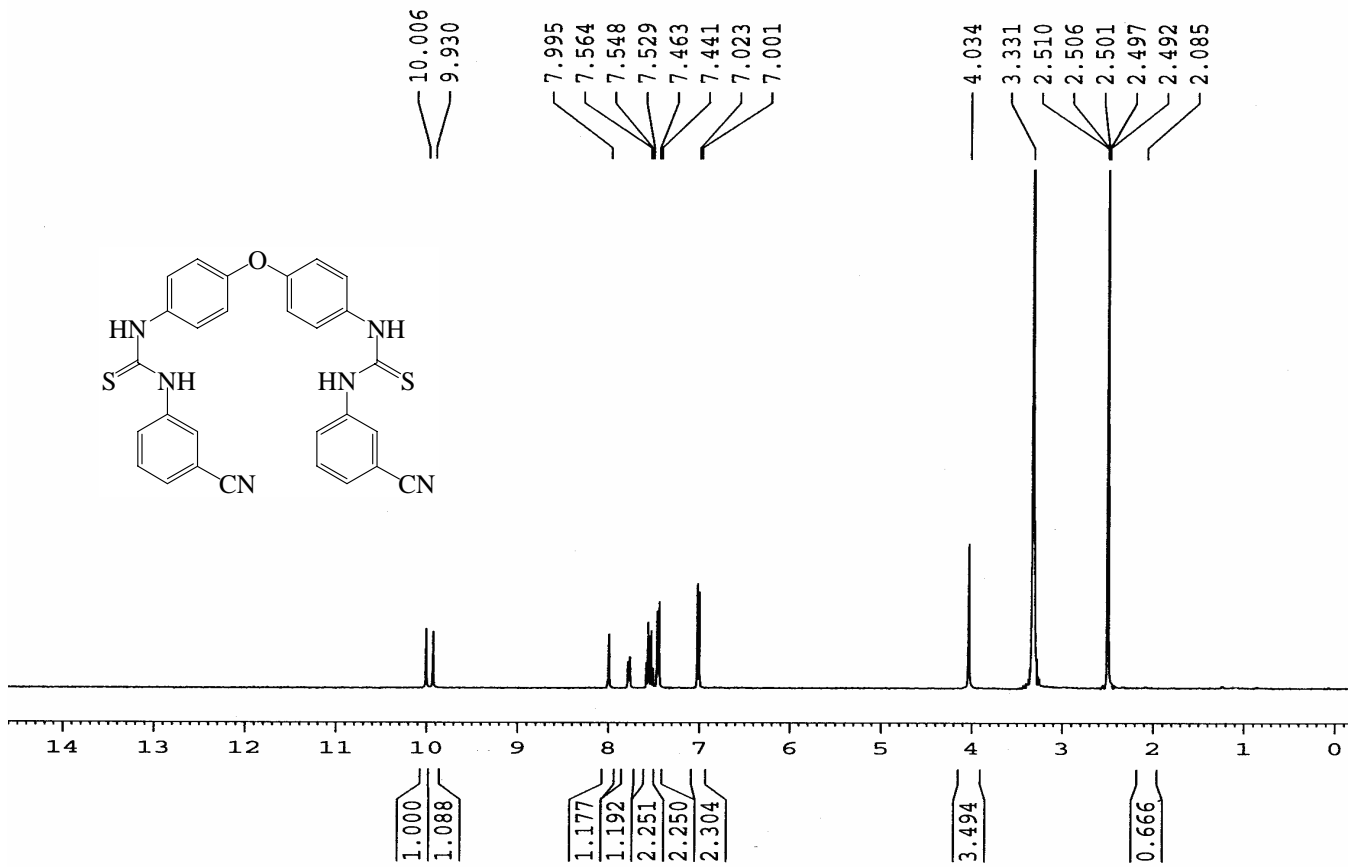


**<sup>1</sup>H NMR spectrum of 7 (DMSO-d<sub>6</sub>)**

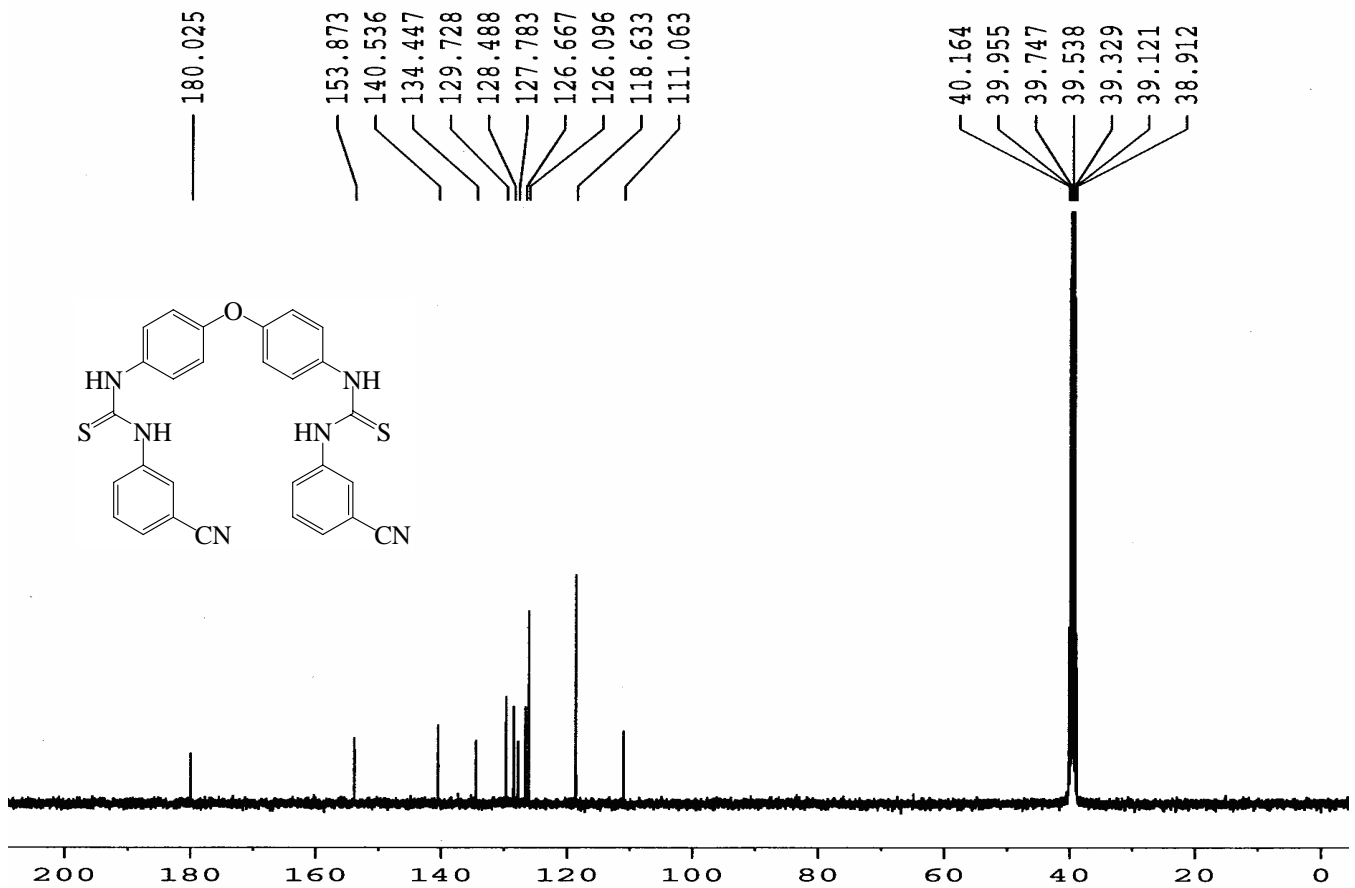


**<sup>13</sup>C NMR spectrum of 7 (DMF-*d*<sub>6</sub>)**

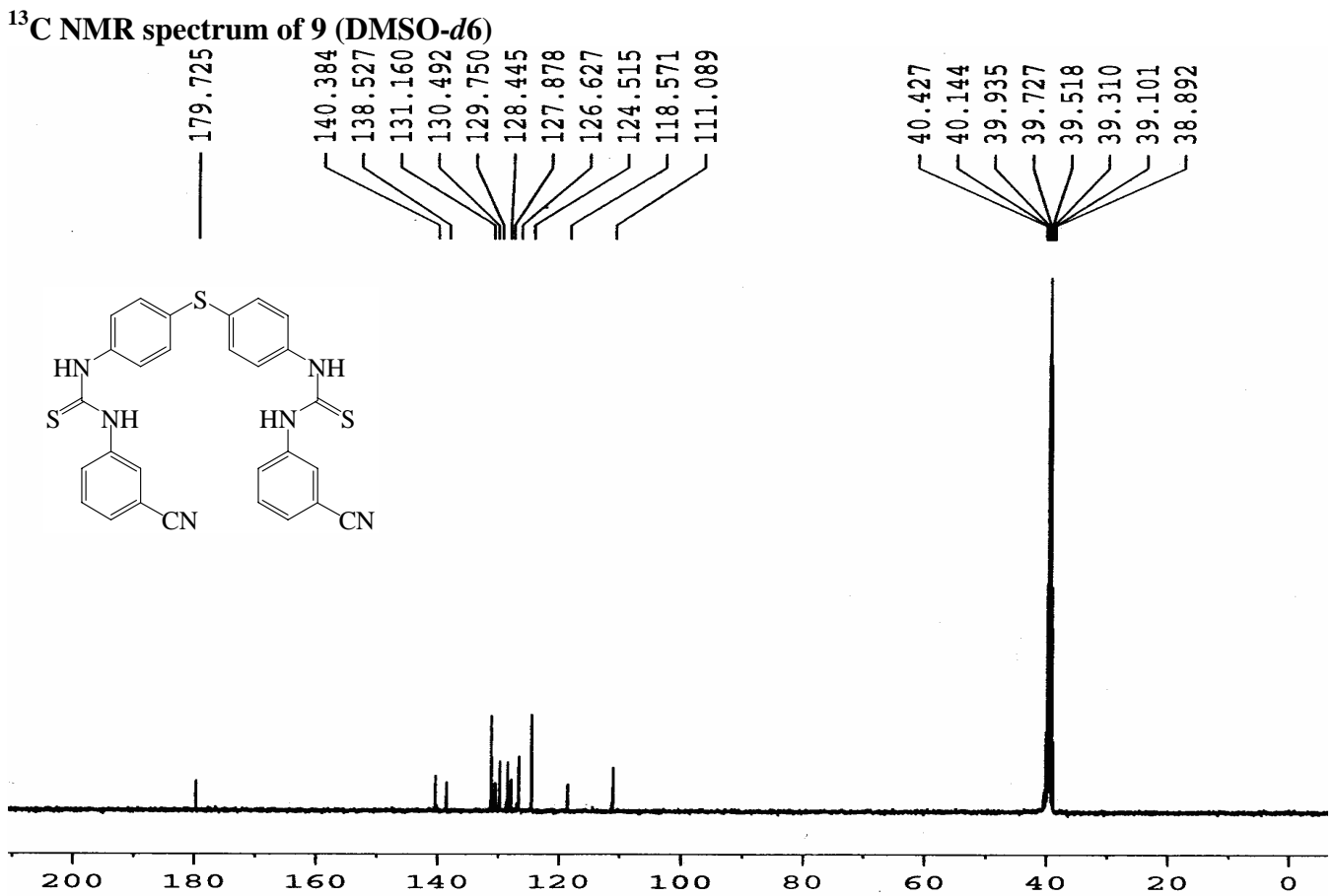
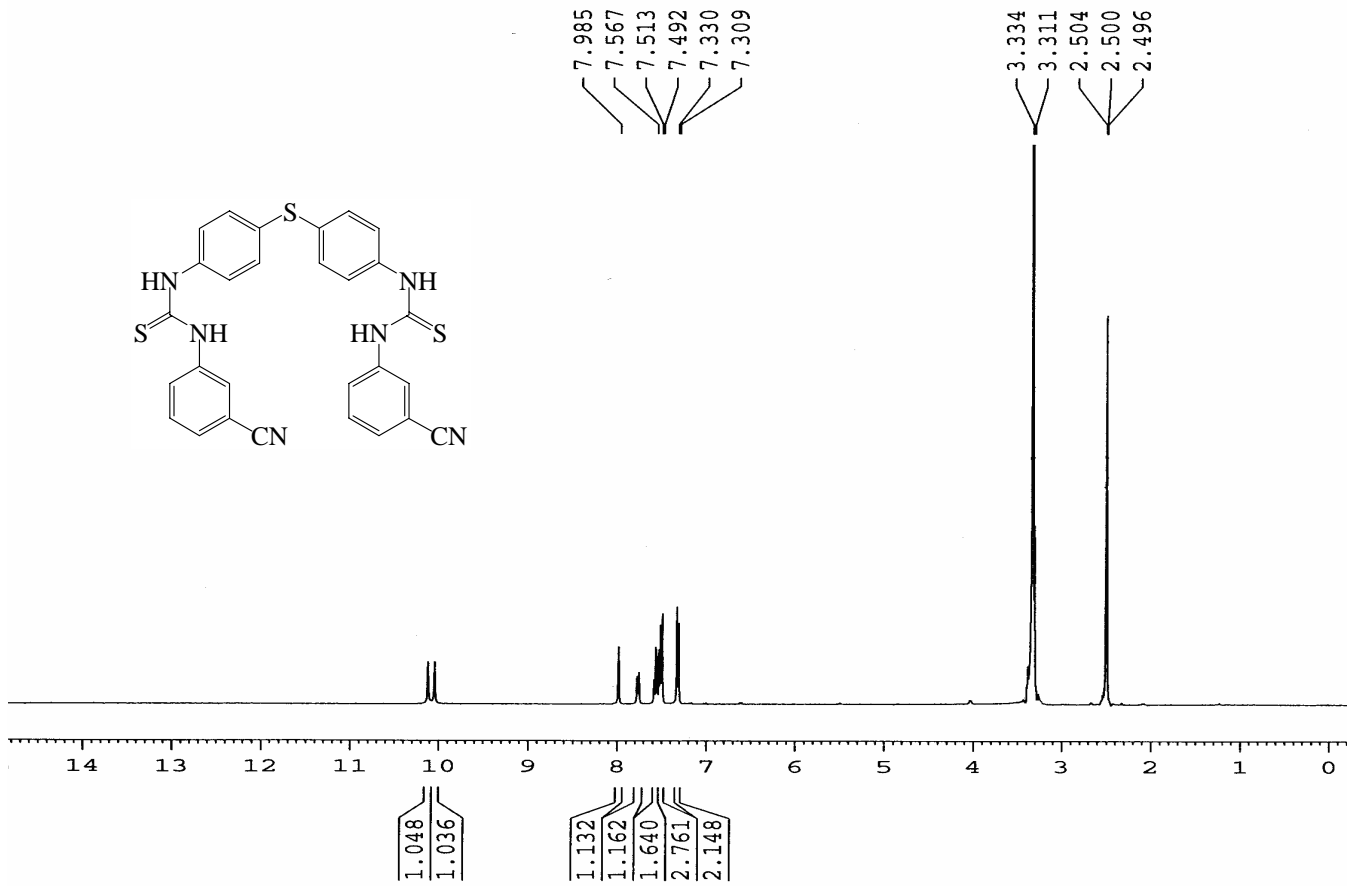




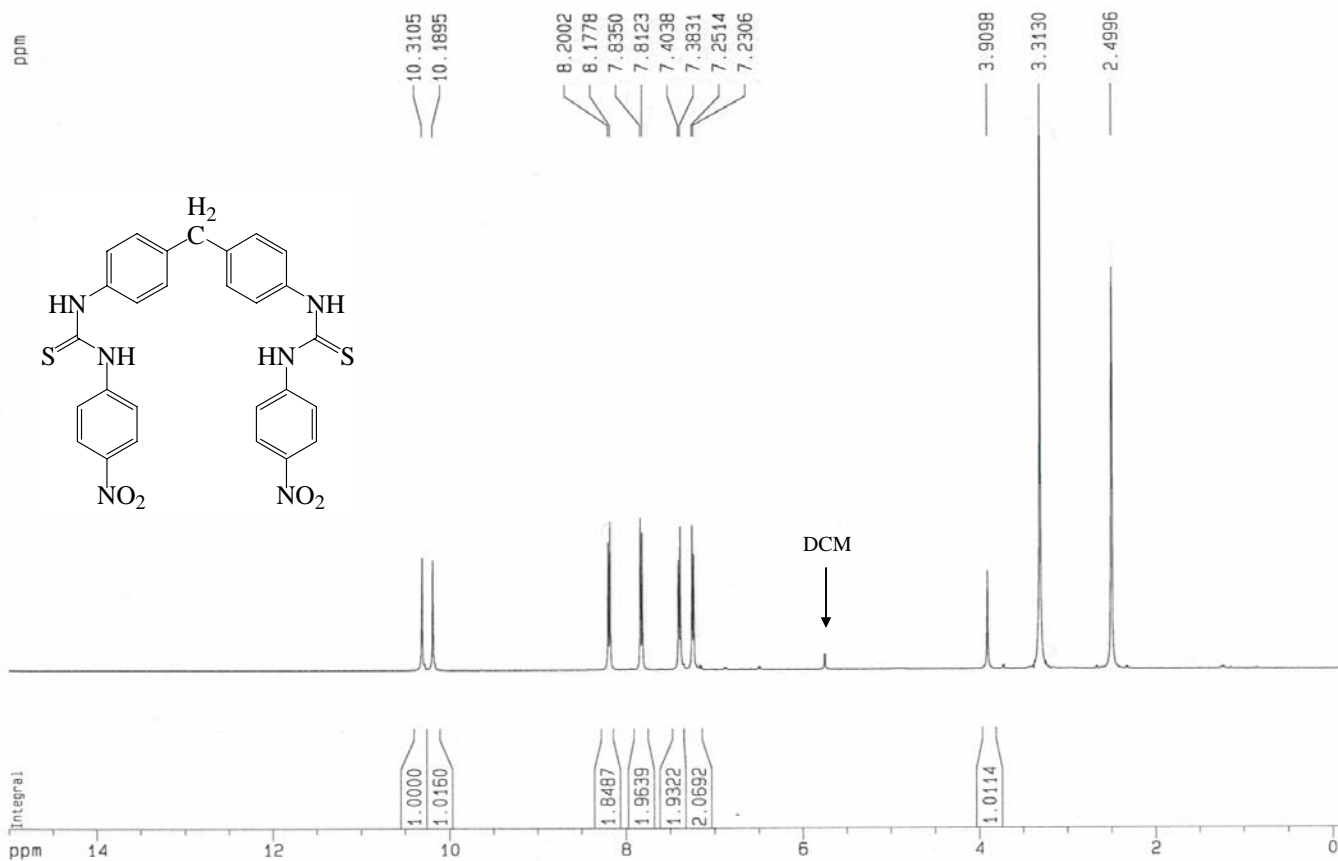
**<sup>13</sup>C NMR spectrum of 8 (DMSO-*d*<sub>6</sub>)**



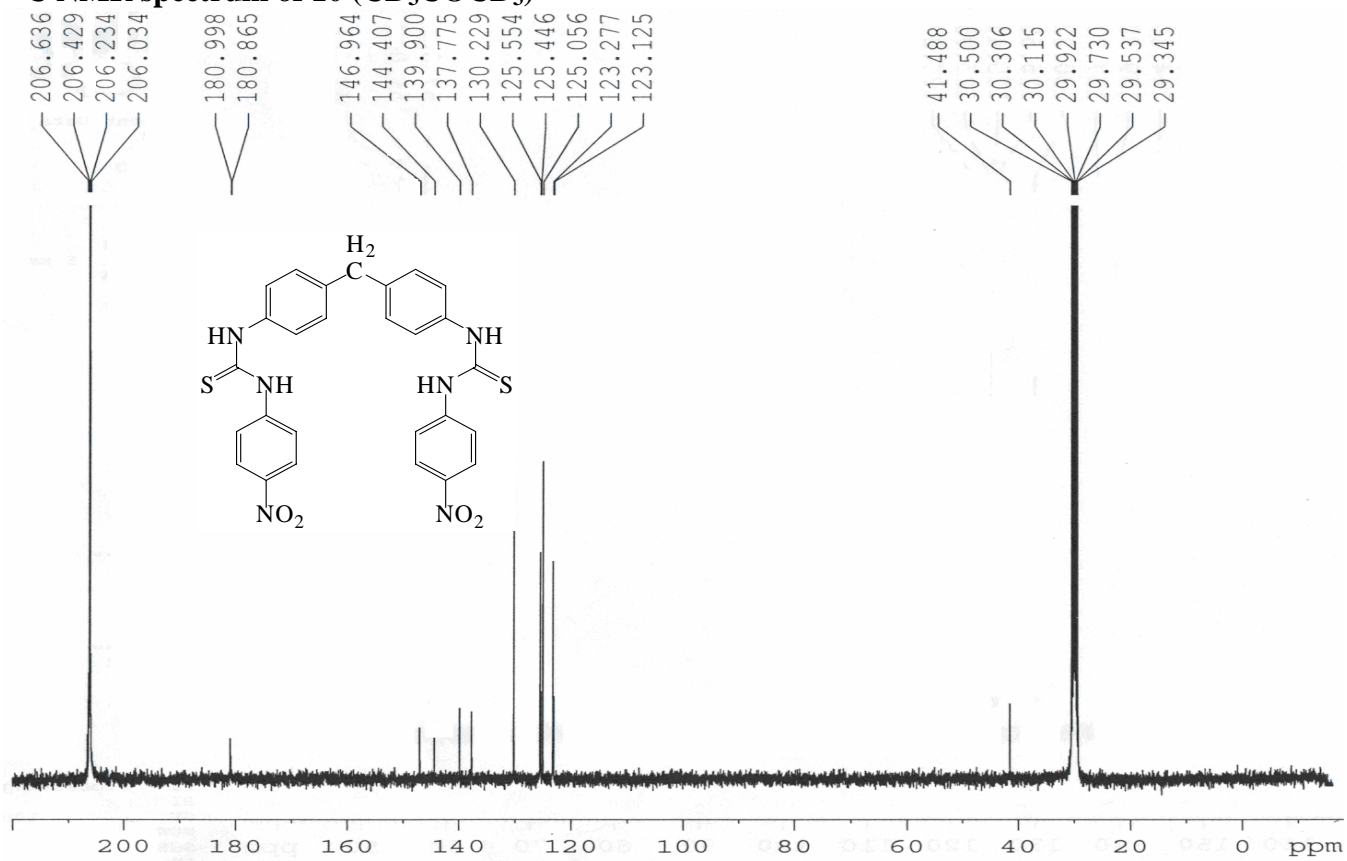
**<sup>1</sup>H NMR spectrum of 9 (DMSO-*d*<sub>6</sub>)**



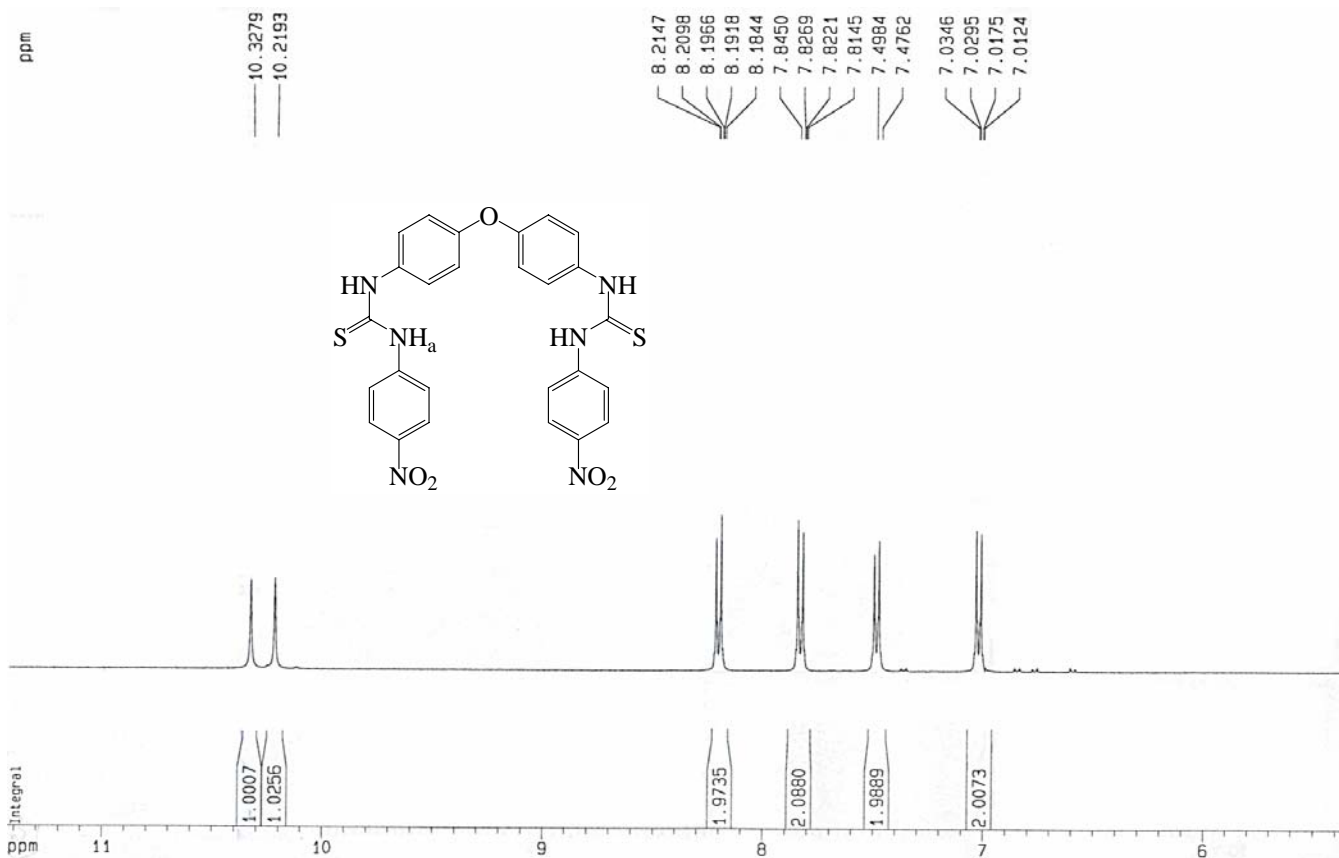
**<sup>1</sup>H NMR spectrum of 10 (DMSO-d<sub>6</sub>)**



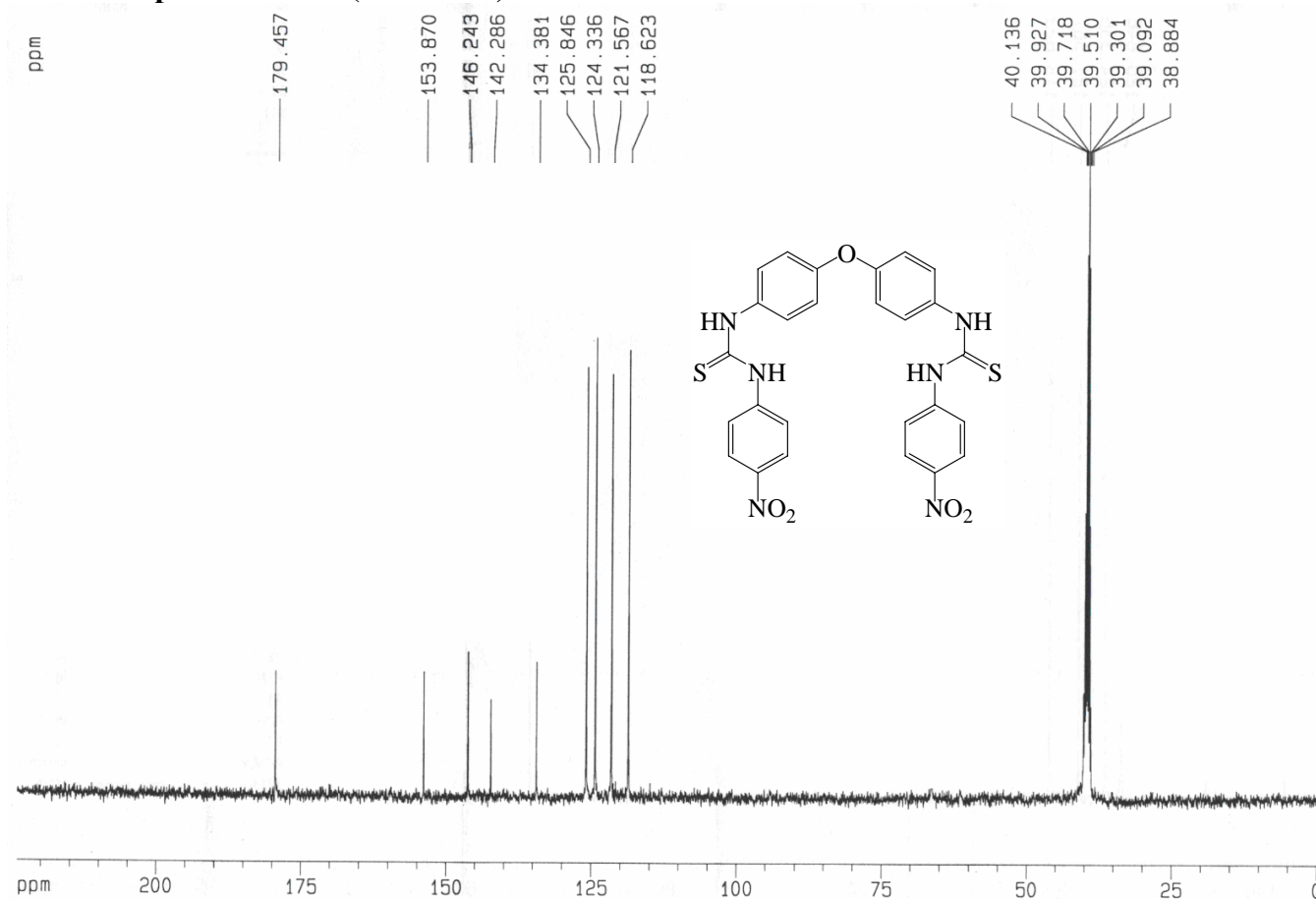
**<sup>13</sup>C NMR spectrum of 10 (CD<sub>3</sub>COCD<sub>3</sub>)**



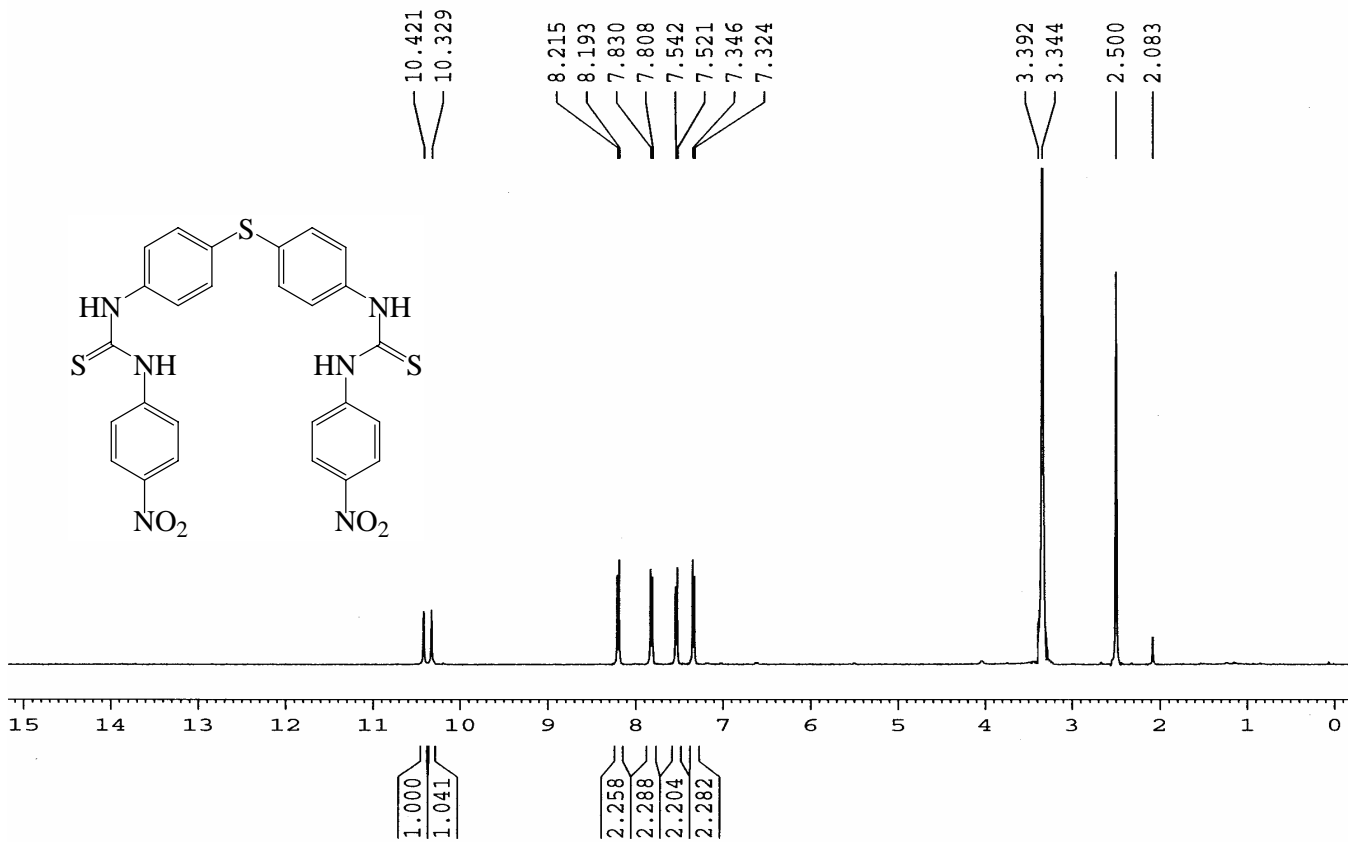
**<sup>1</sup>H NMR spectrum of 11 (DMSO-*d*<sub>6</sub>)**



**<sup>13</sup>C NMR spectrum of 11 (DMSO-*d*<sub>6</sub>)**



**<sup>1</sup>H NMR spectrum of 12 (DMSO-*d*<sub>6</sub>)**



**<sup>13</sup>C NMR spectrum of 12 (DMSO-*d*<sub>6</sub>)**

