

Electronic Supplementary Information

Synthesis, structure and coordinating properties of novel bifunctional carboxylic derivatives of *1,3-alternate* tetrathiacalix[4]arene

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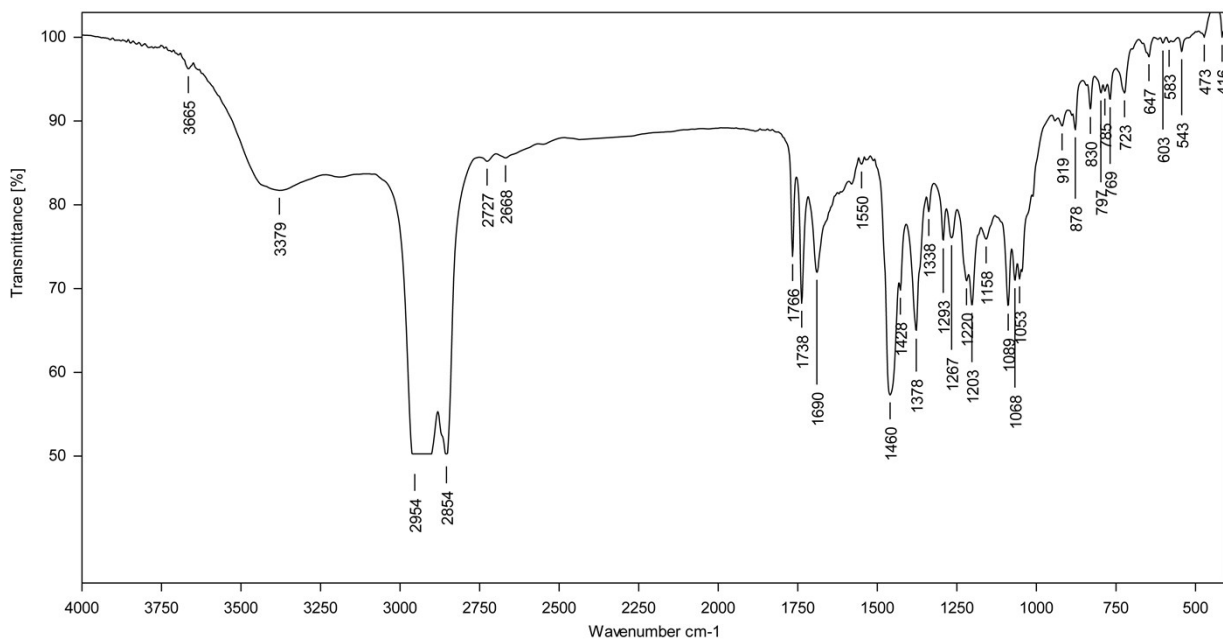
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1. Copies of IR spectra of compounds 3a and 3b

a)



b)

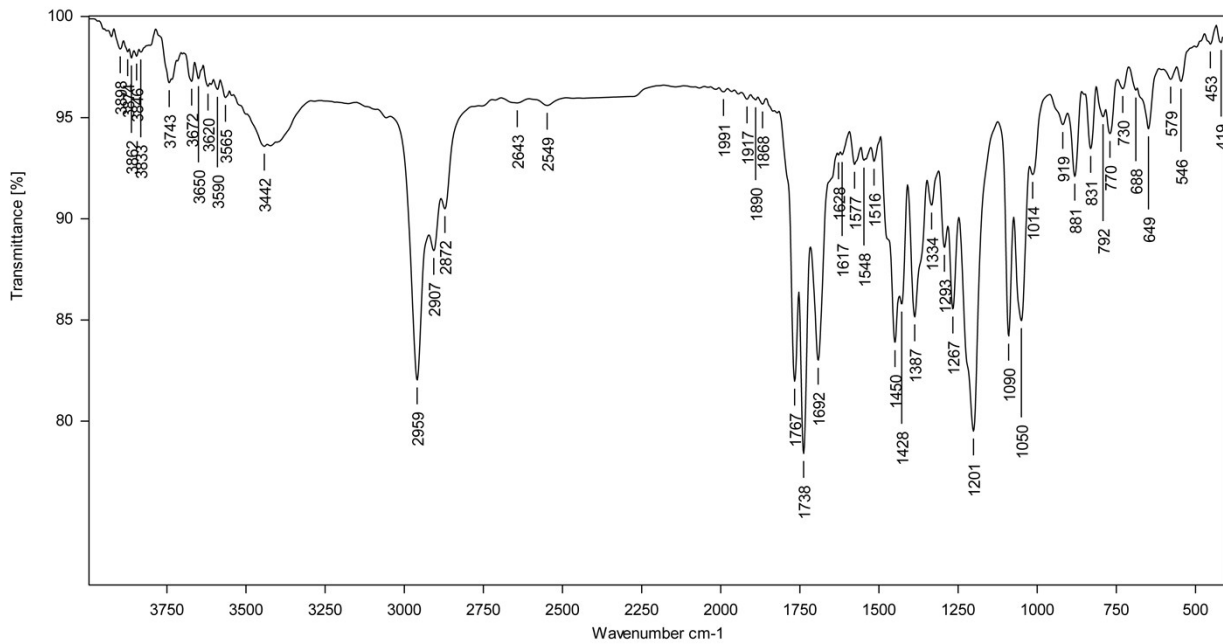
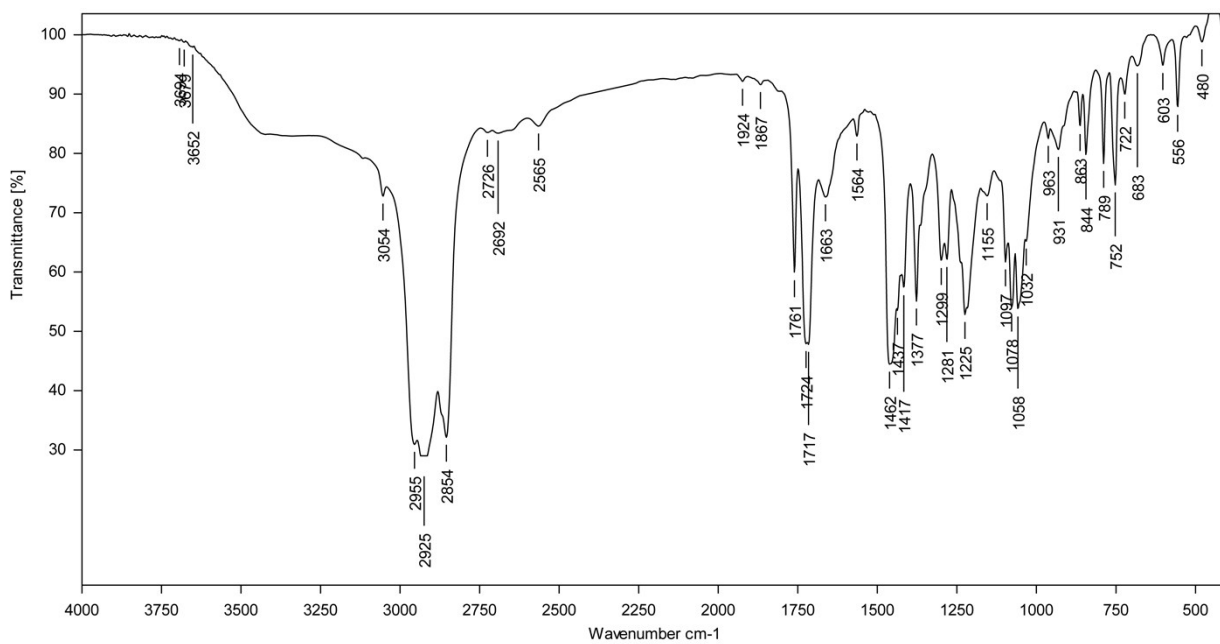


Figure 1. IR-spectrum of 3a: a) in nujol; b) in KBr pellet

a)



b)

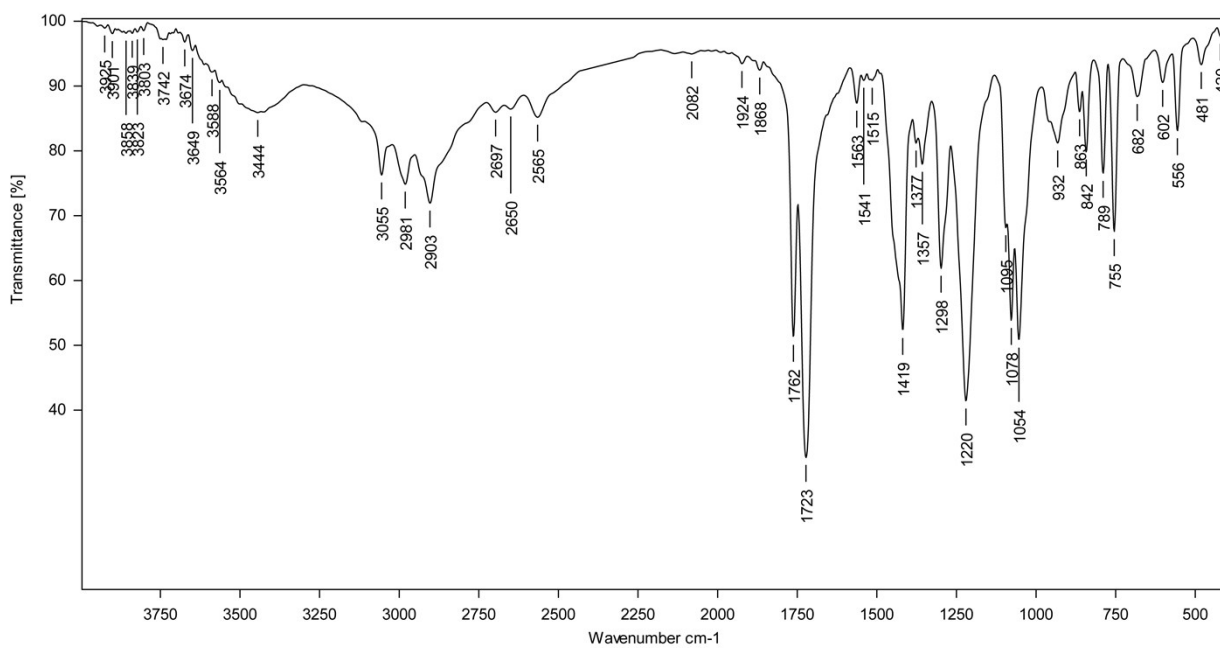


Figure 2. IR-spectrum of **3b**: a) in nujol; b) in KBr pellet

2. Copies of ^1H NMR, ^{13}C NMR and IR spectra of compound 4a

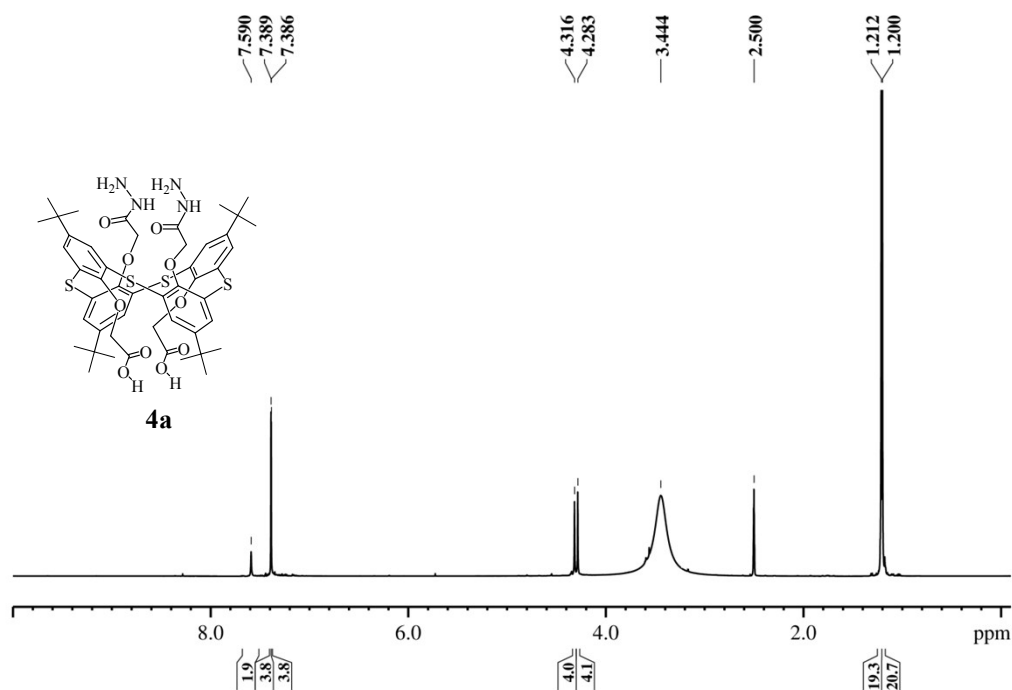


Figure 3. ^1H NMR spectrum (DMSO- d_6) of **4a**.

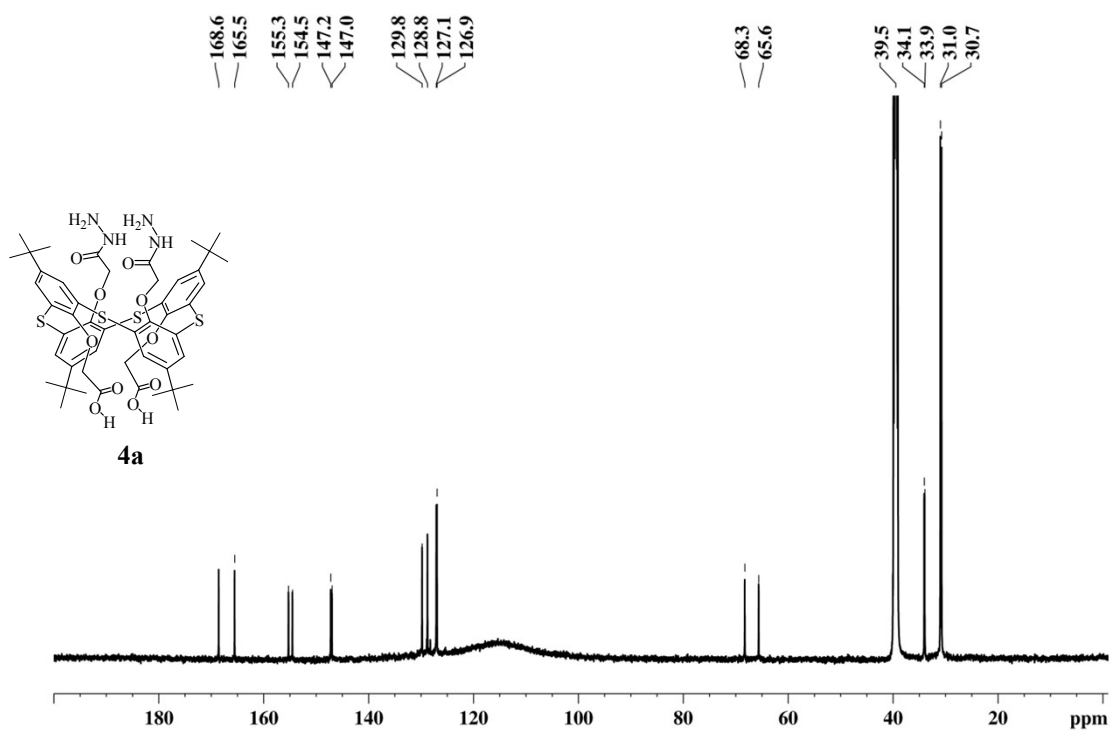
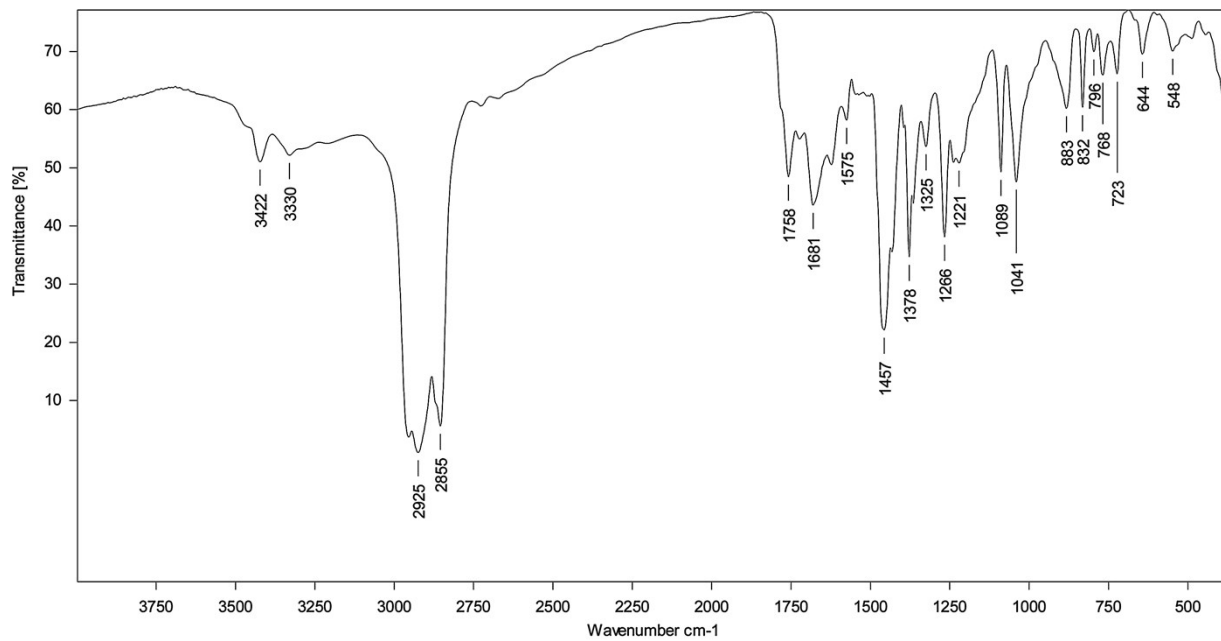


Figure 4. ^{13}C NMR spectrum (DMSO- d_6) of **4a**.

a)



b)

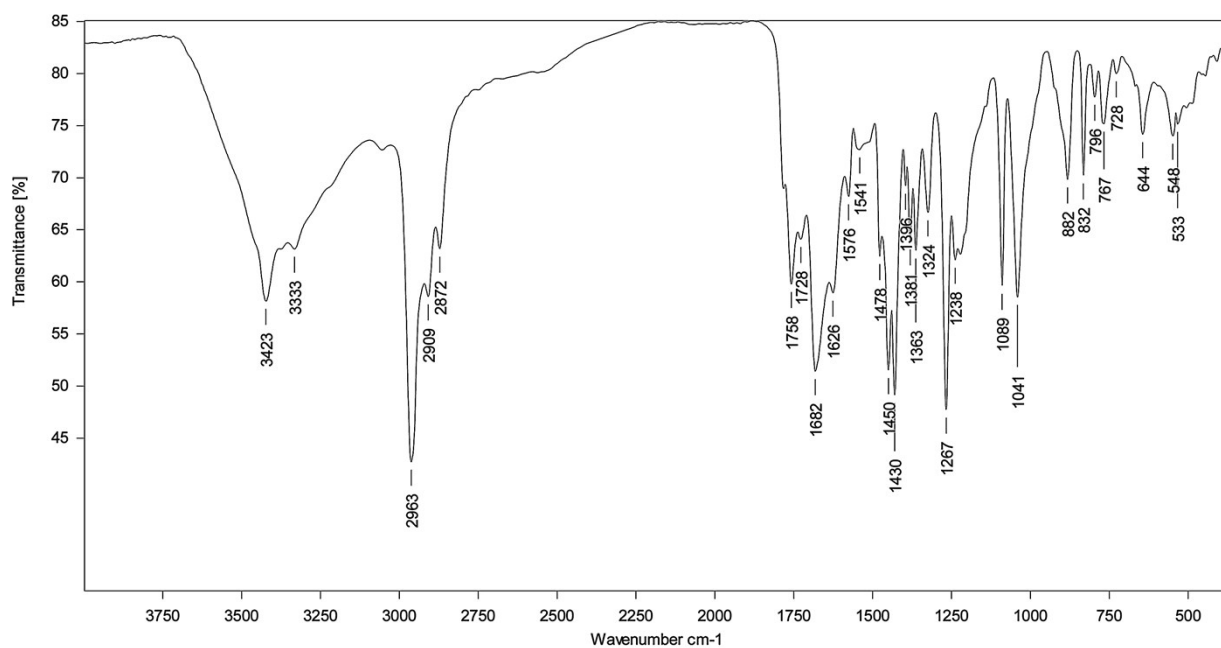


Figure 5. IR-spectrum of **4a**: a) in nujol; b) in KBr pellet

3. Copies of ^1H NMR, ^{13}C NMR and IR spectra of compound **4b**

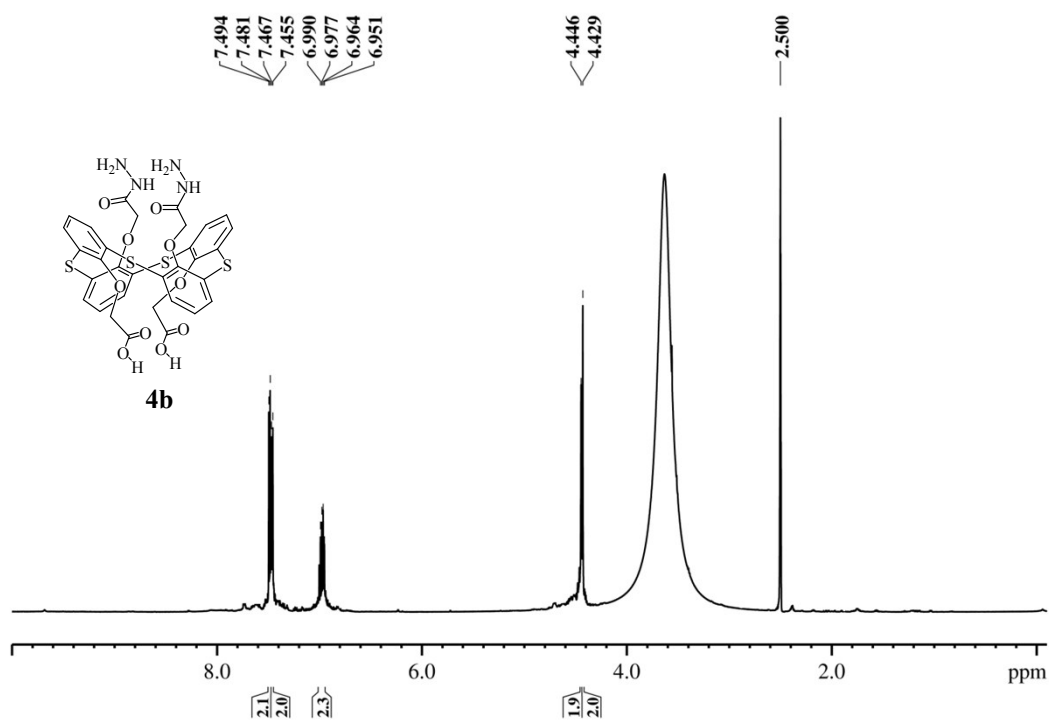


Figure 6. ^1H NMR spectrum ($\text{DMSO-}d_6$) of **4b**.

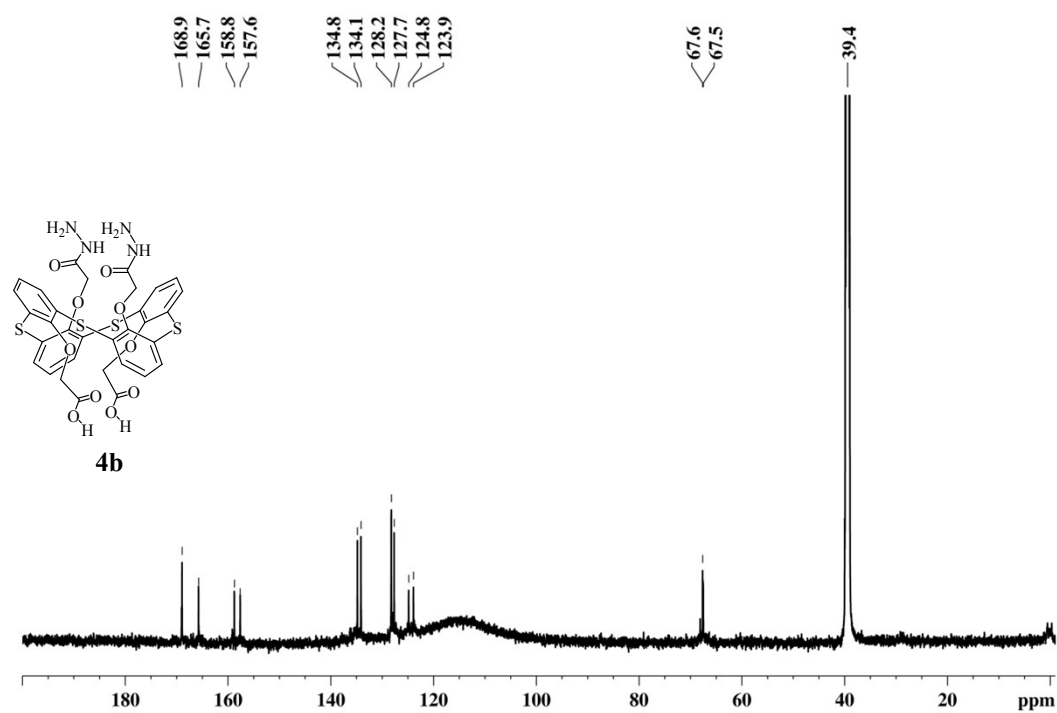
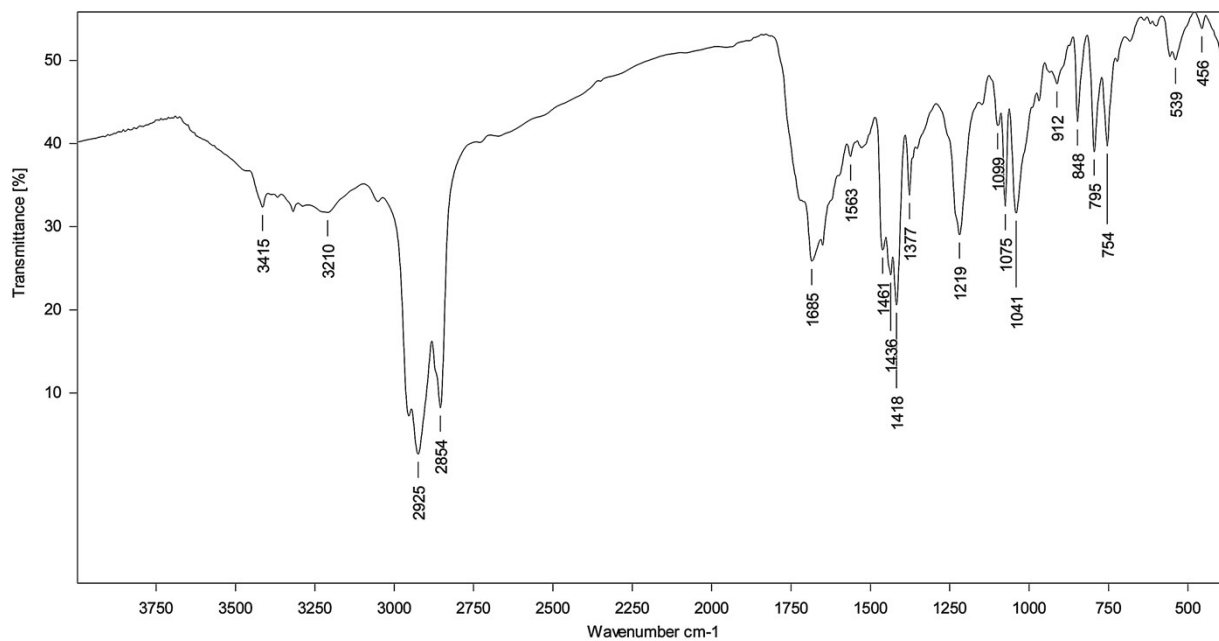


Figure 7. ^{13}C NMR spectrum ($\text{DMSO-}d_6$) of **4b**.

a)



b)

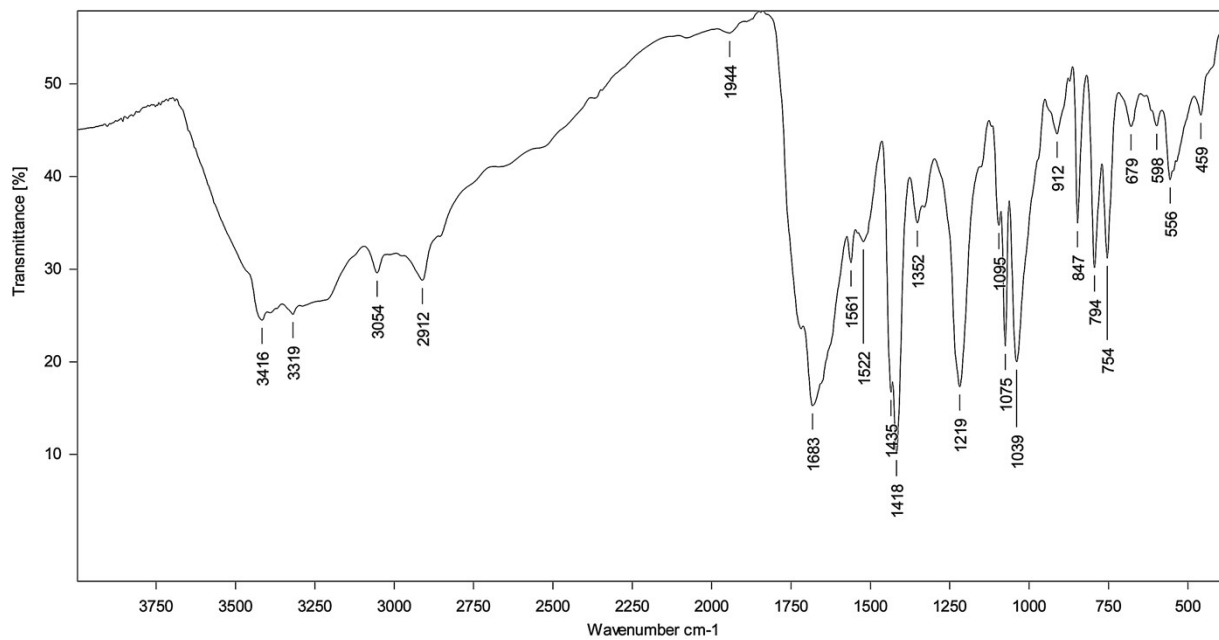


Figure 8. IR-spectrum of **4b**: a) in nujol; b) in KBr pellet

5. Copies of ^1H NMR, ^{13}C NMR and IR spectra of compound 5

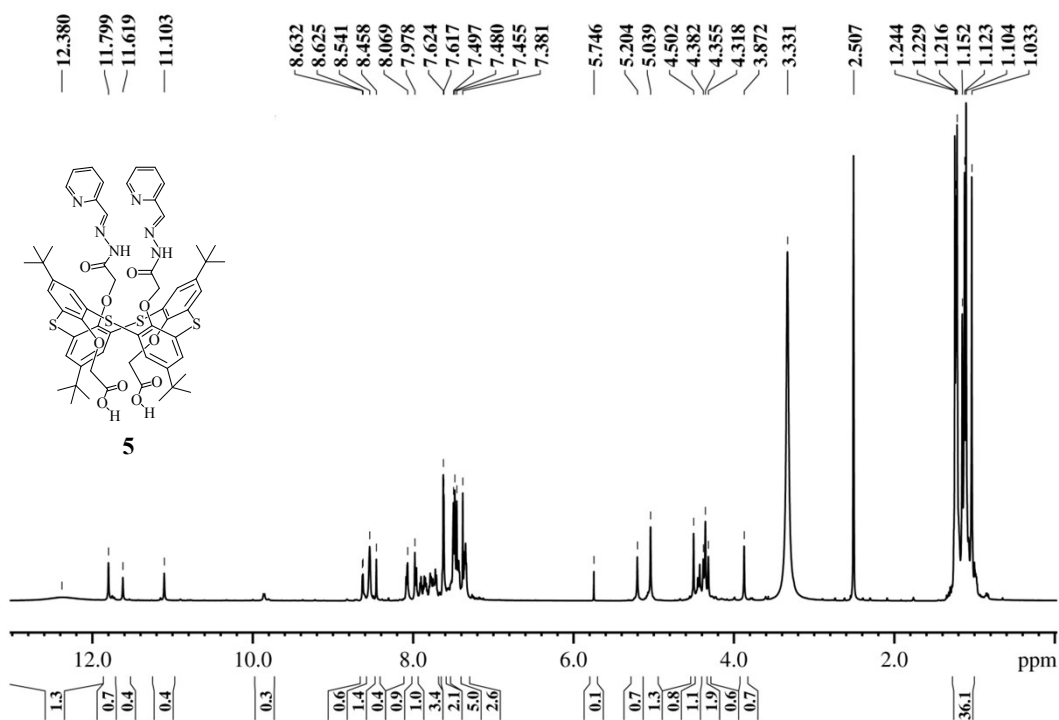


Figure 9. ^1H NMR spectrum (DMSO- d_6) of 5.

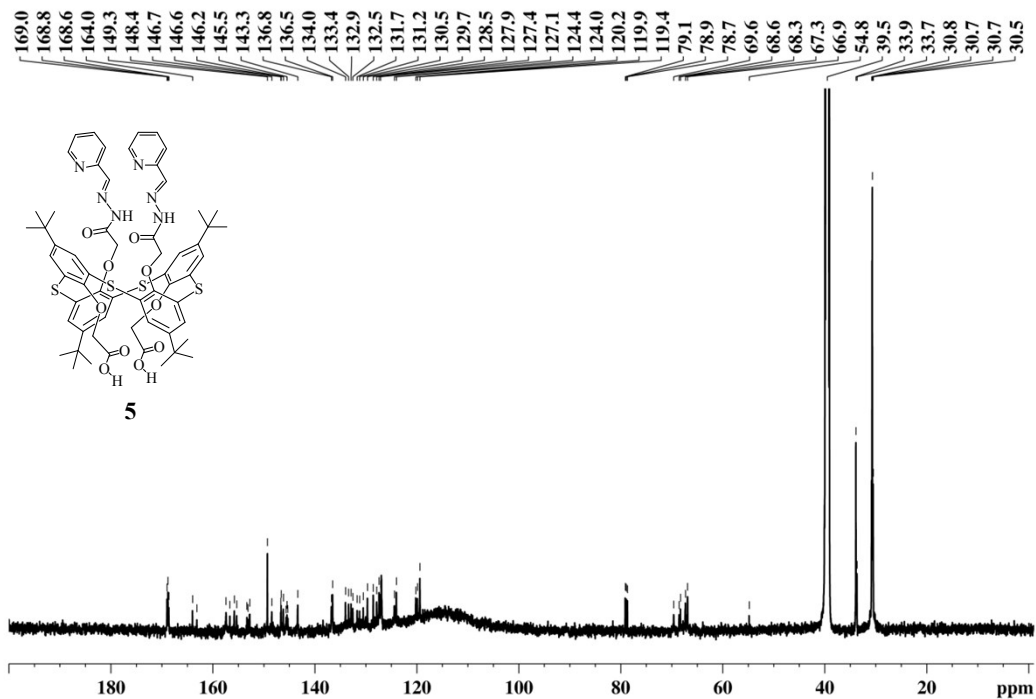
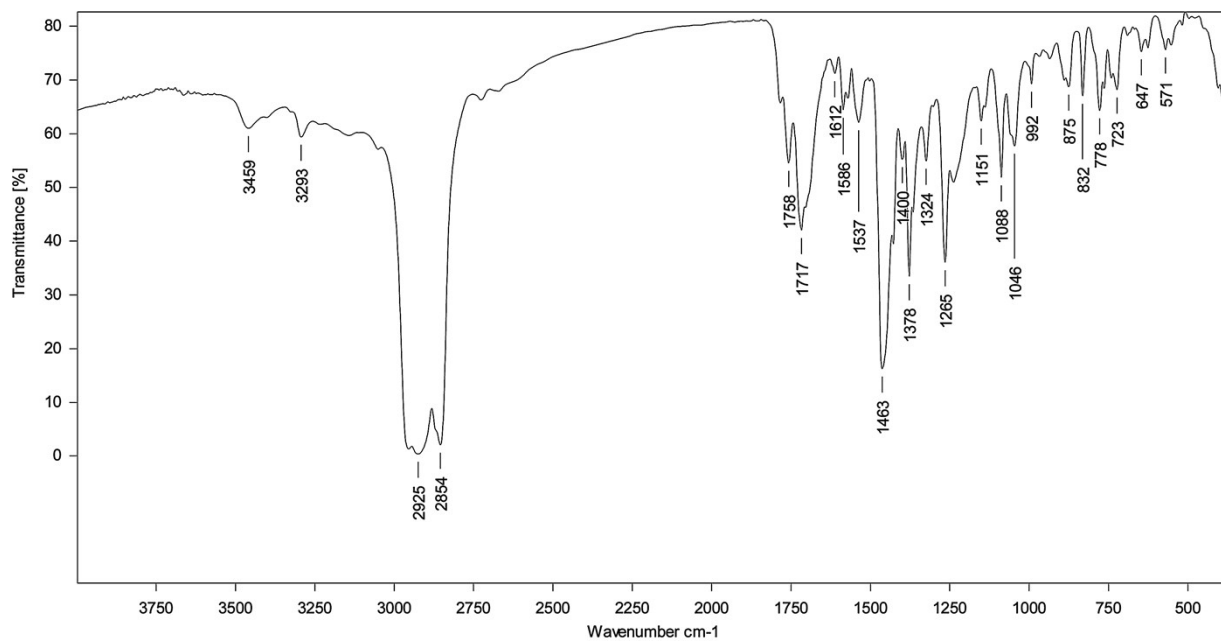


Figure 10. ^{13}C NMR spectrum (DMSO- d_6) of 5.

a)



b)

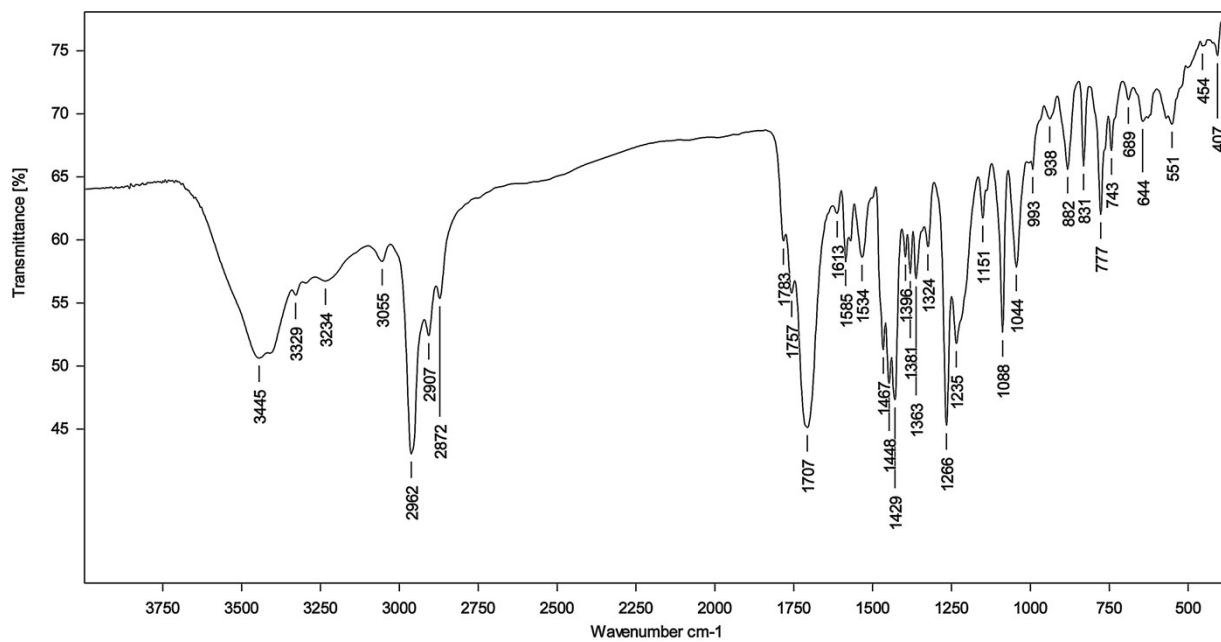


Figure 11. IR-spectrum of **5**: a) in nujol; b) in KBr pellet

6. Copies of ^1H NMR, ^{13}C NMR and IR spectra of compound 6

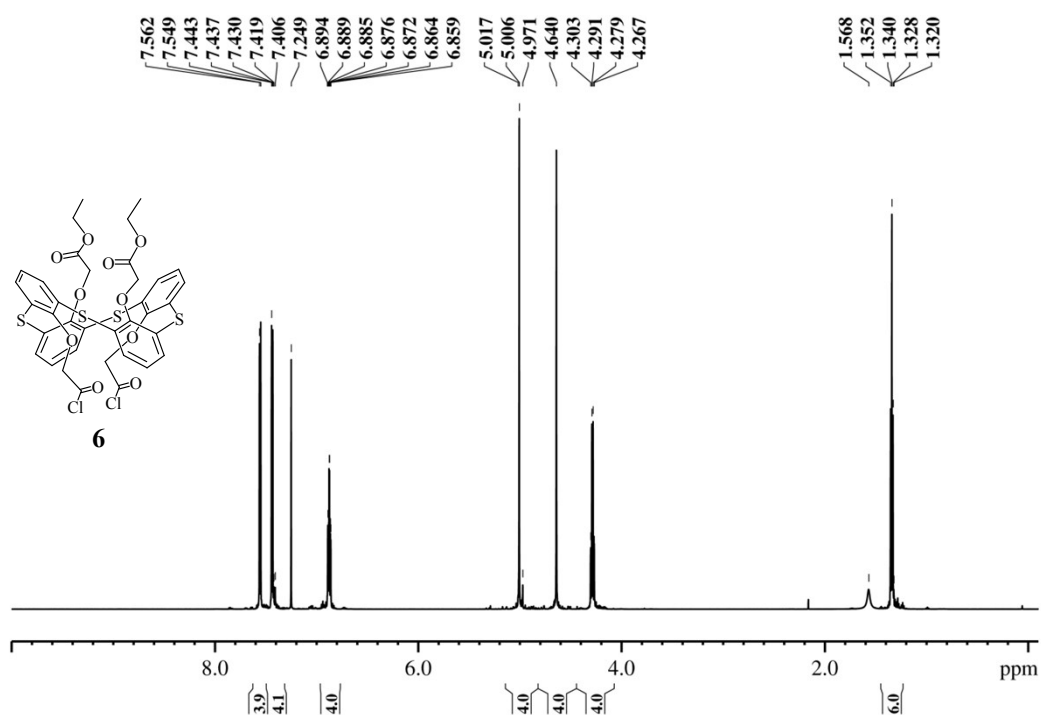


Figure 12. ^1H NMR spectrum (DMSO- d_6) of 6.

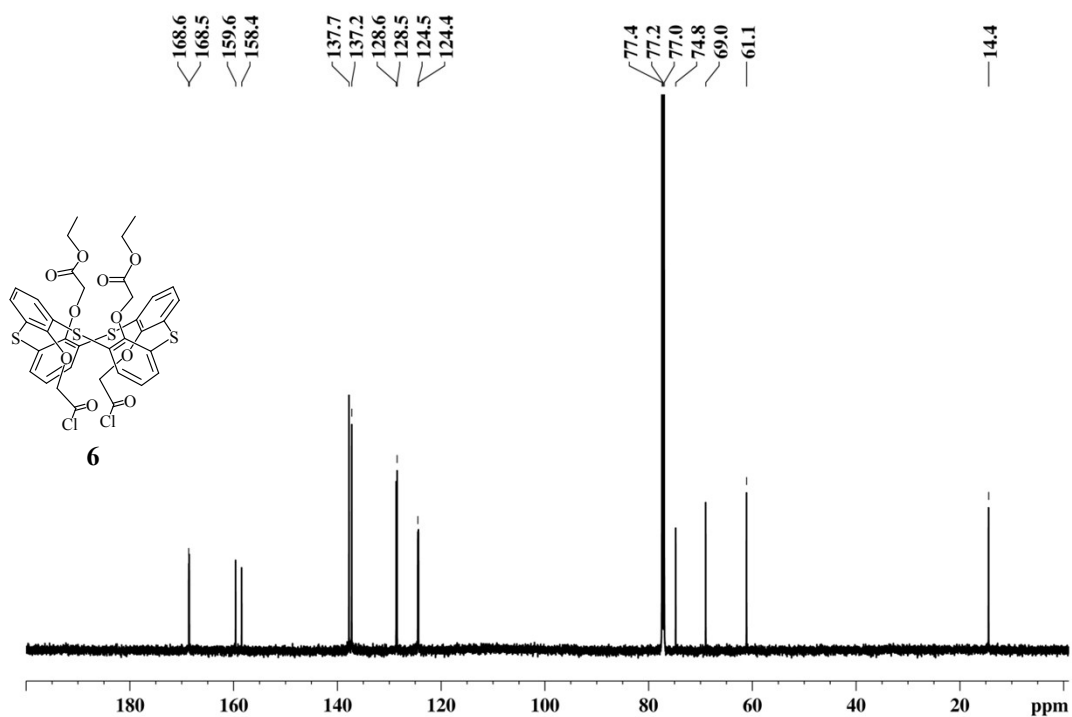
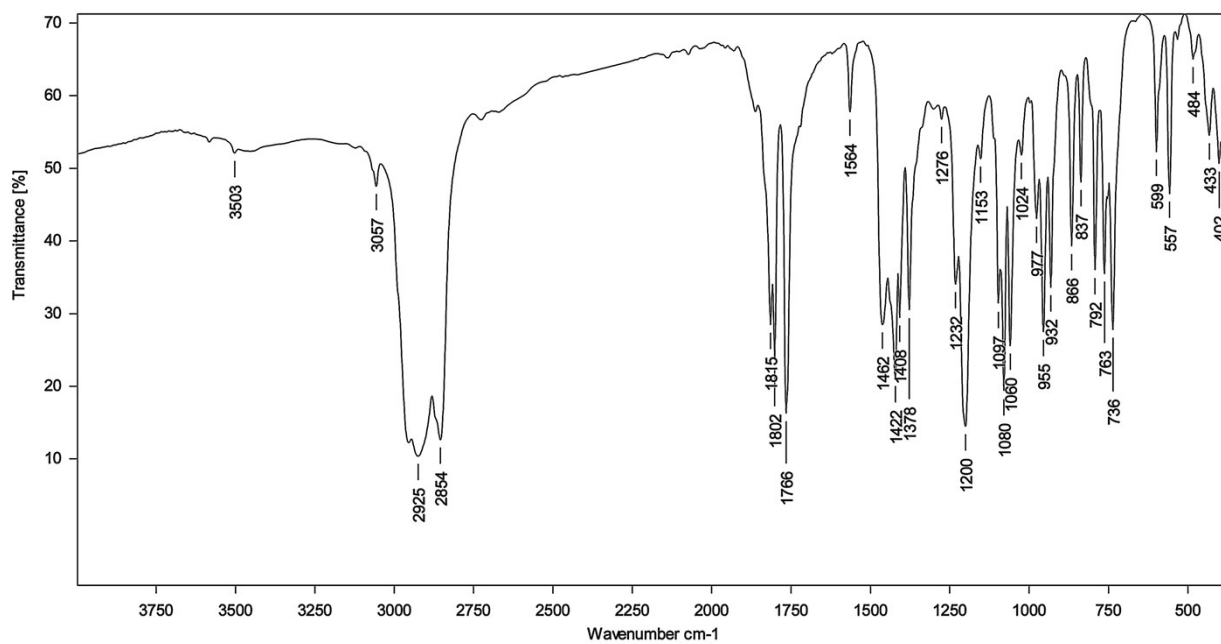


Figure 13. ^{13}C NMR spectrum (DMSO- d_6) of 6.

a)



b)

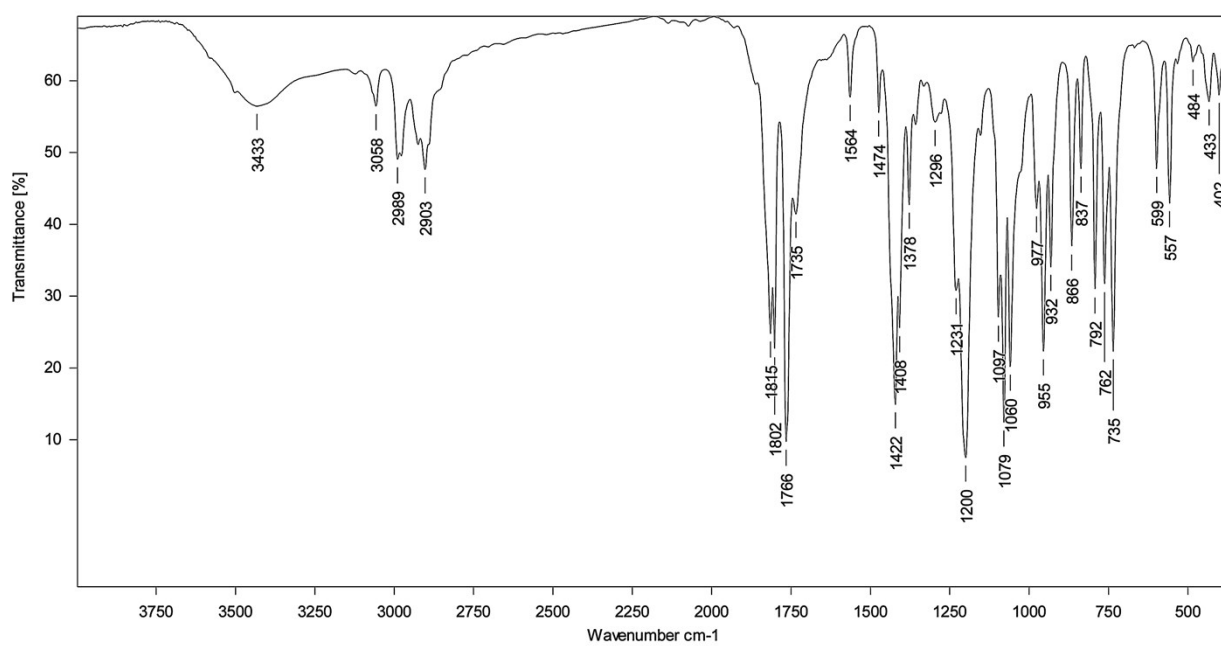


Figure 14. IR-spectrum of **6**: a) in nujol; b) in KBr pellet

7. Copies of ^1H NMR, ^{13}C NMR and IR spectra of compound 7

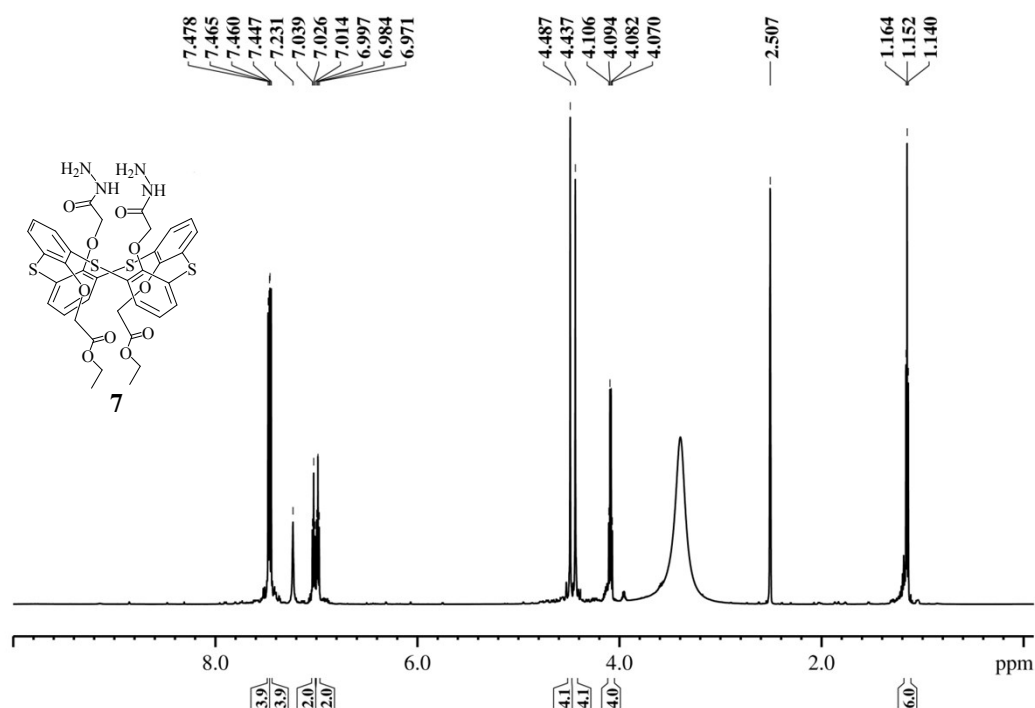


Figure 15. ^1H NMR spectrum (DMSO- d_6) of 7.

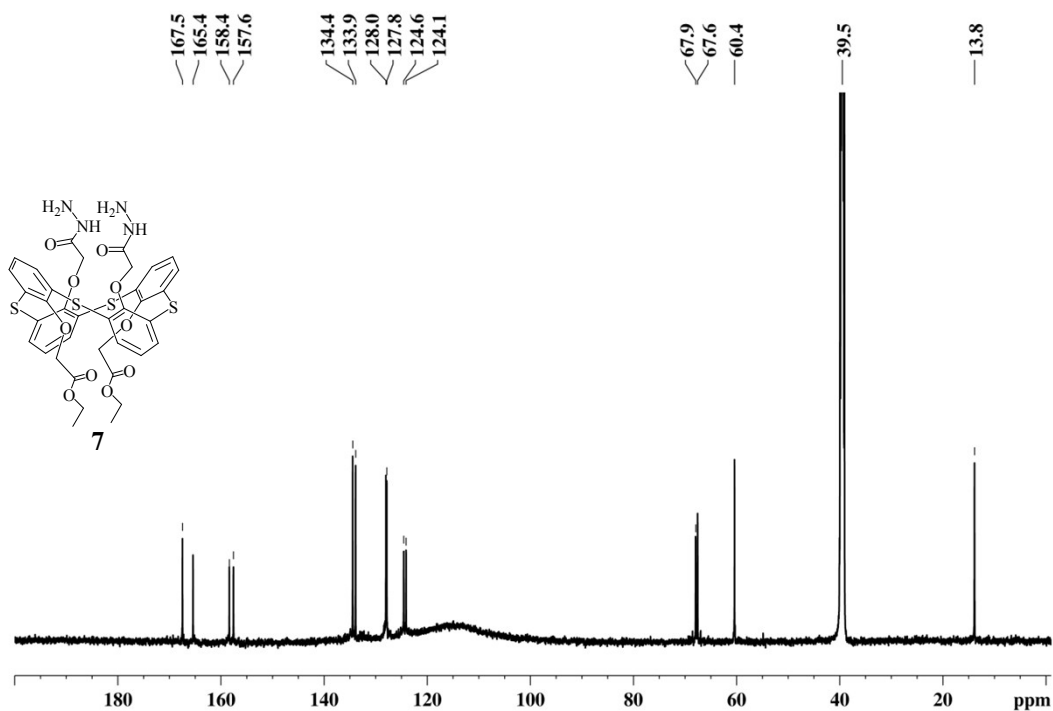
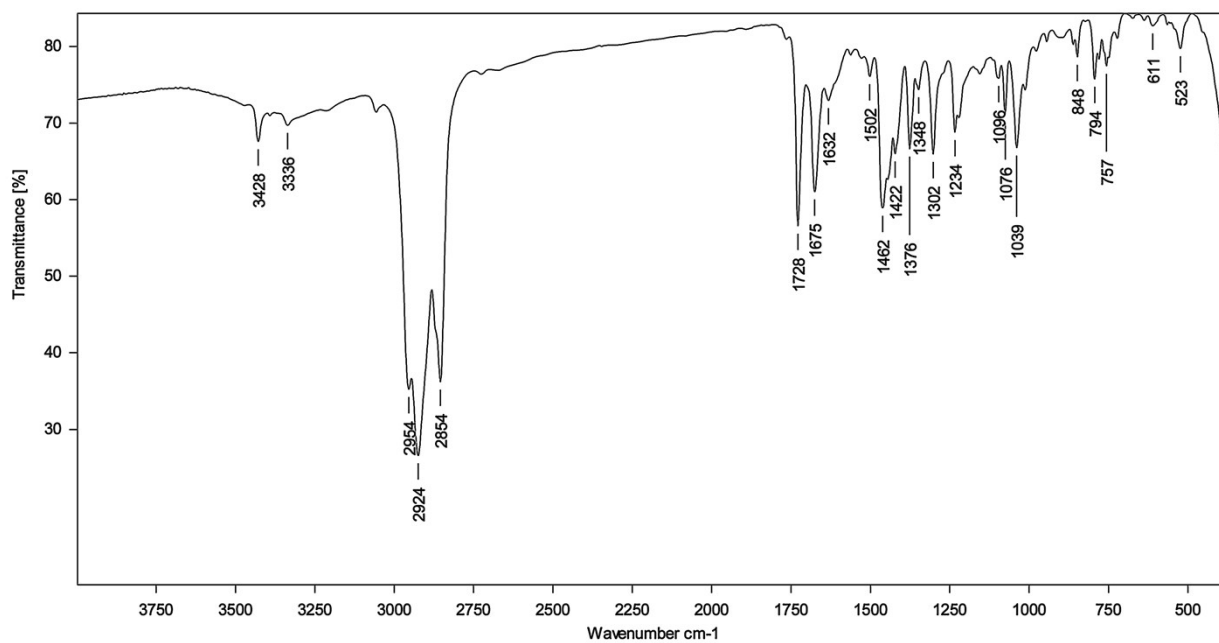


Figure 16. ^{13}C NMR spectrum (DMSO- d_6) of 7.

a)



b)

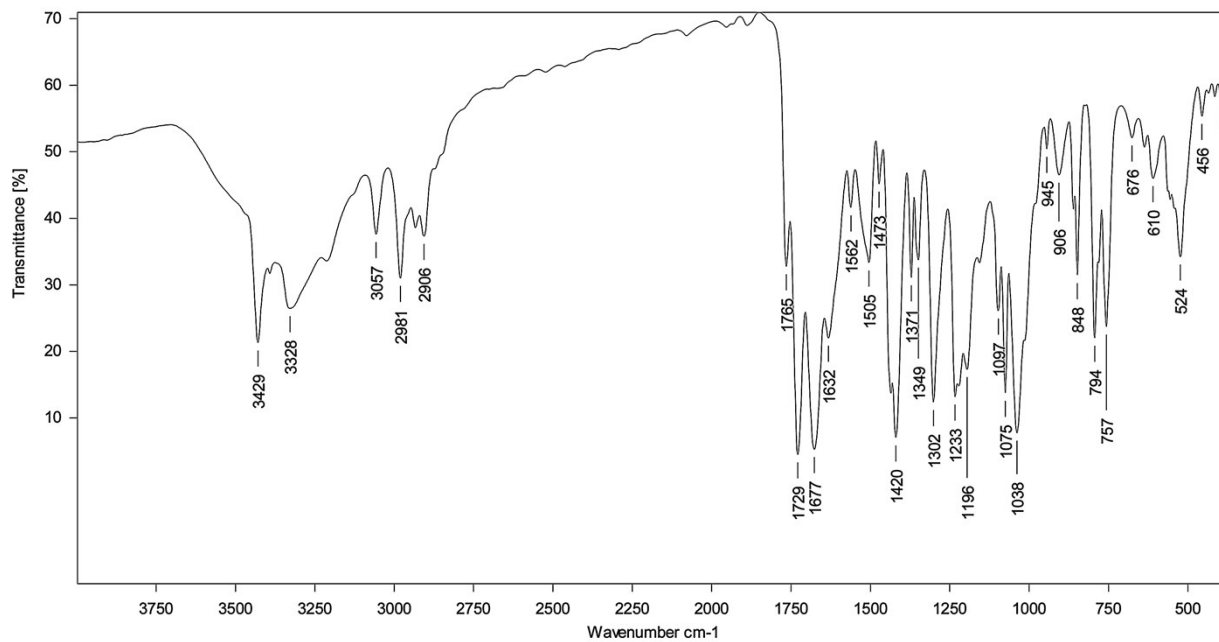


Figure 17. IR-spectrum of 7: a) in nujol; b) in KBr pellet