

Supporting Information Part II

1D and 2D NMR Spectra IR Spectra and MS Spectra

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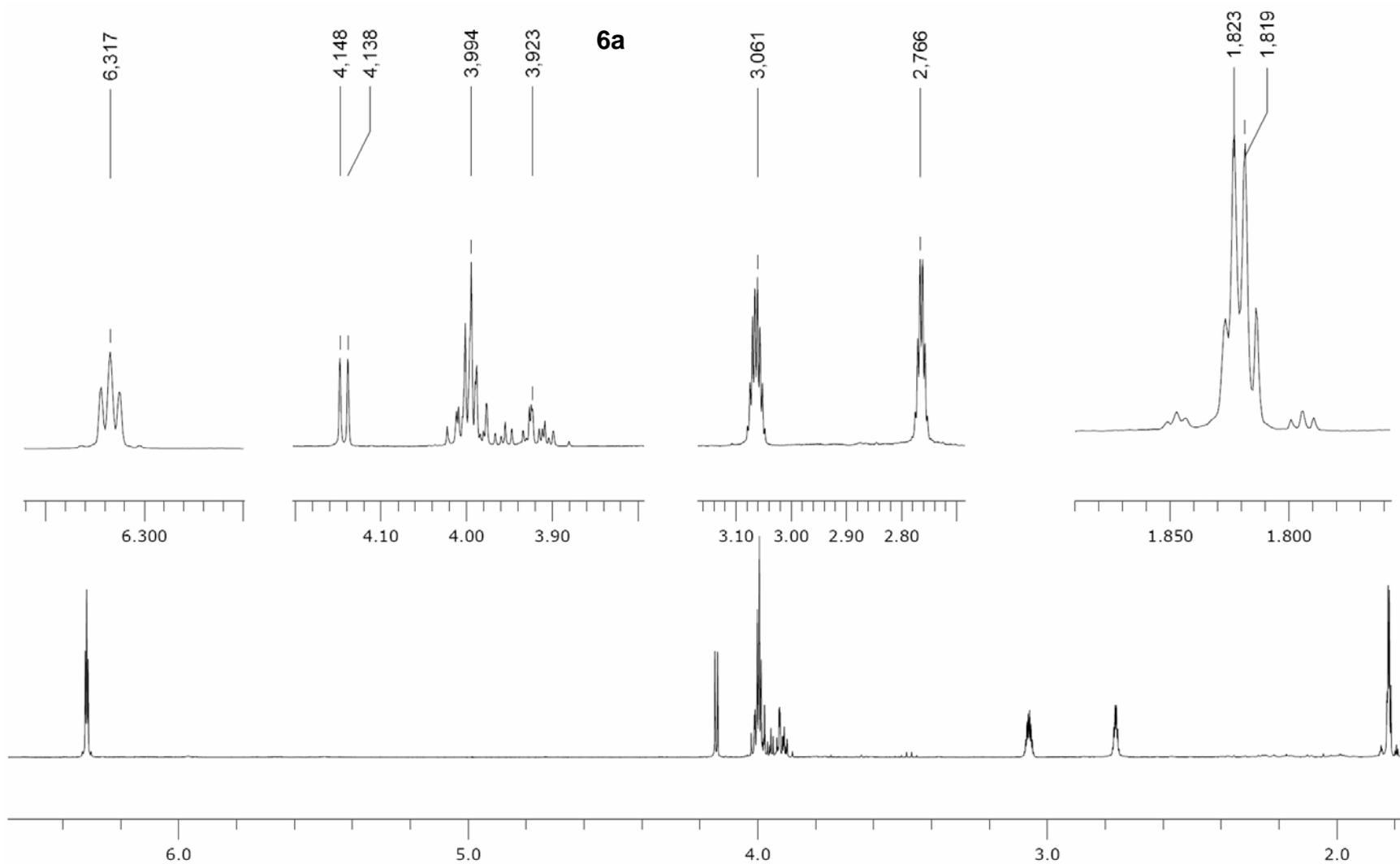
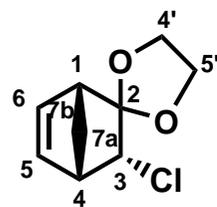
IR Spectra of Precursor

46.	IR Spectra of 5	S47
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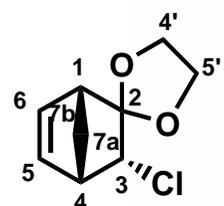
MS Spectra of Products and Precursor

50.	MS Spectra of 1a	S51
51.	MS Spectra of 5	S52
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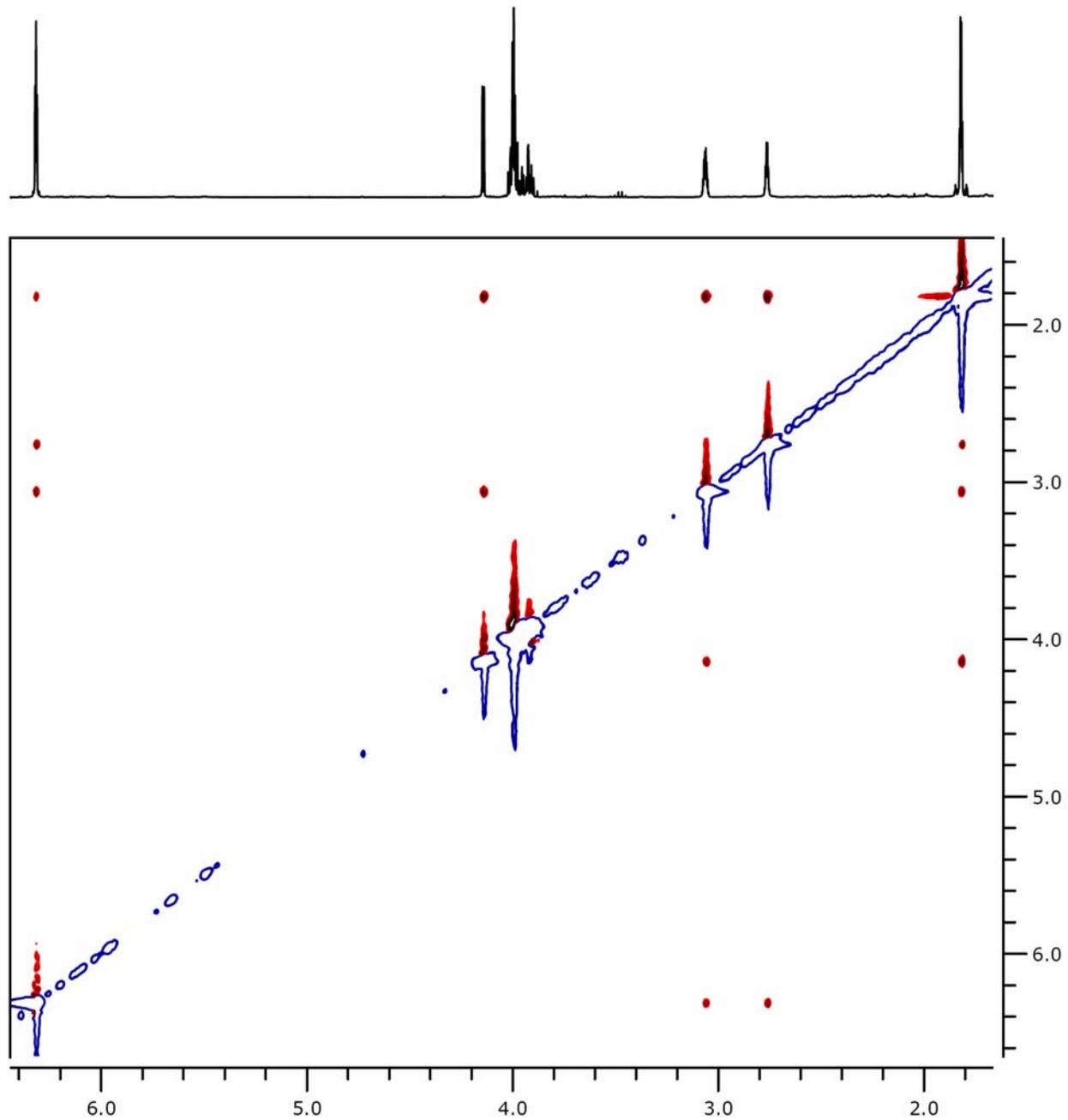
^1H NMR of **6a**



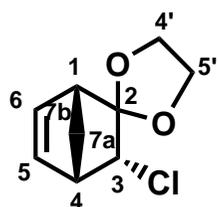
NOESY of 6a



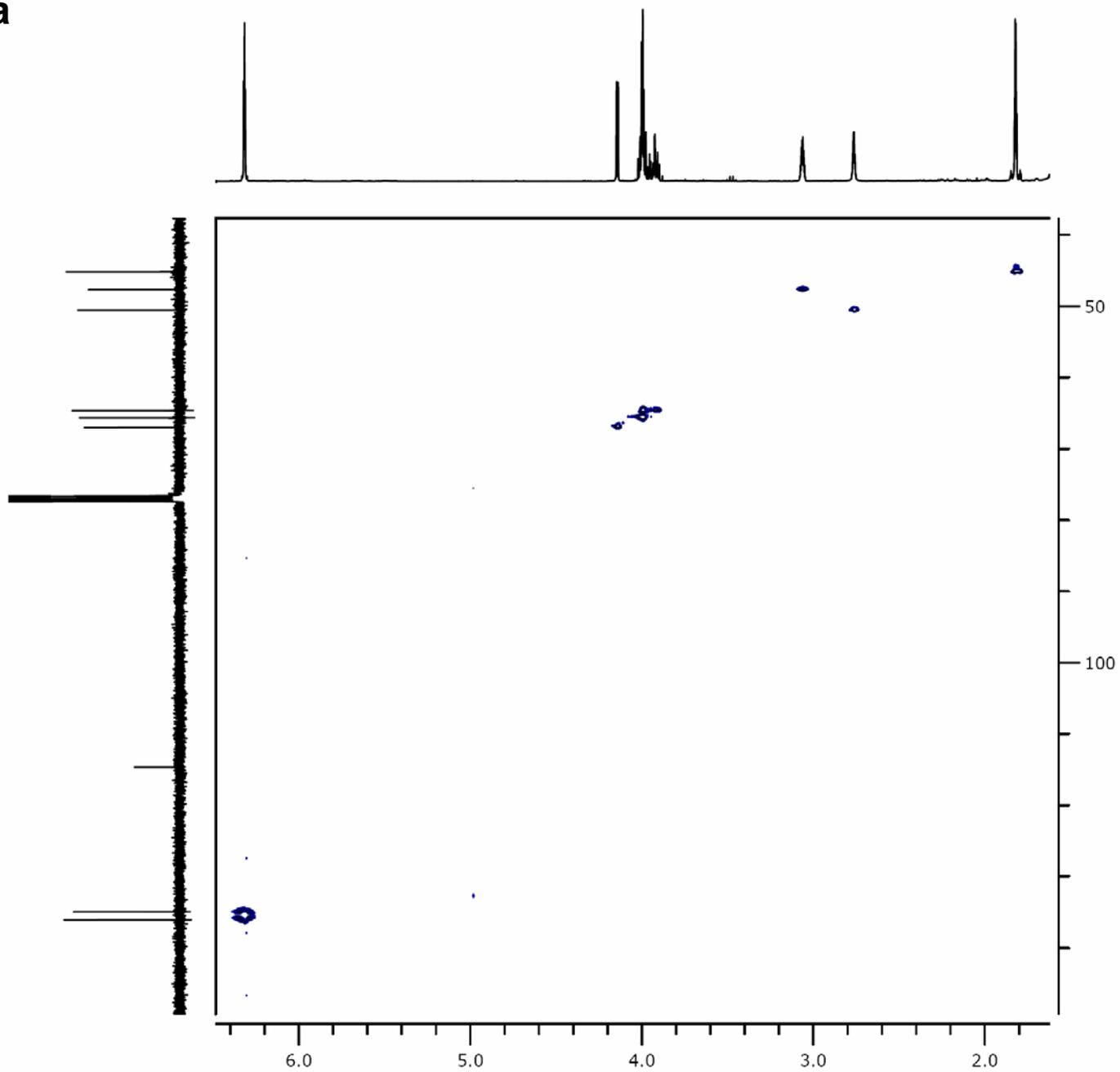
6a



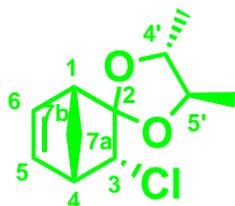
HMQC of 6a



6a



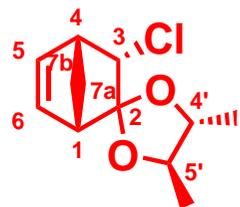
TOCSY1D of mixture
diastereoisomers of **6d**



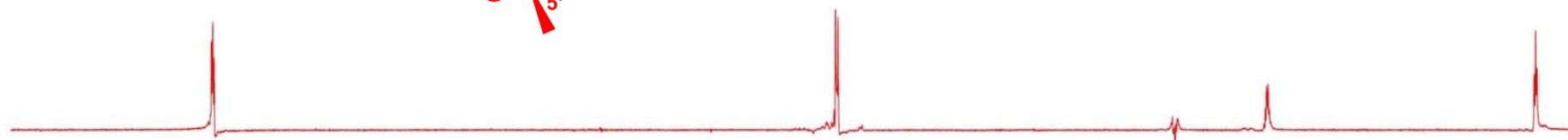
(1R,3R,4S,4'R,5'R)-**6d**



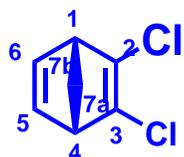
Tocsy1D Experiment



(1S,3S,4R,4'R,5'R)-**6d**



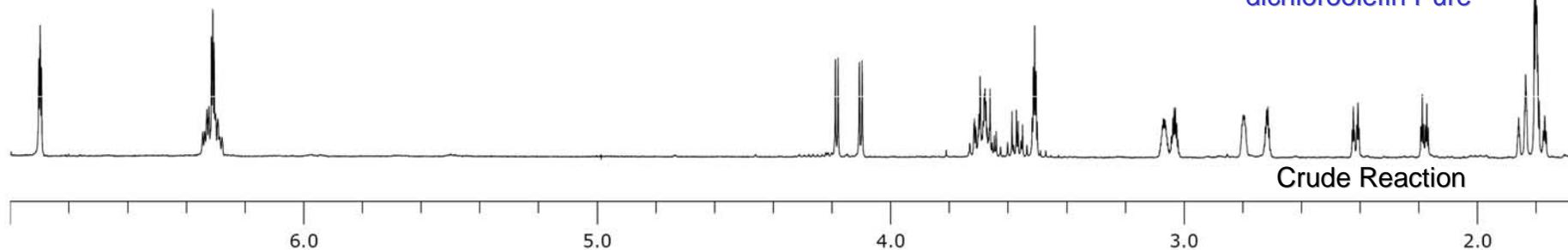
Tocsy1D Experiment

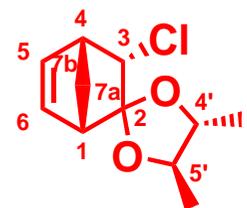
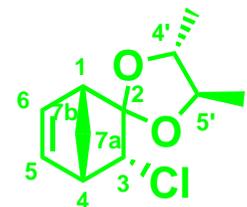
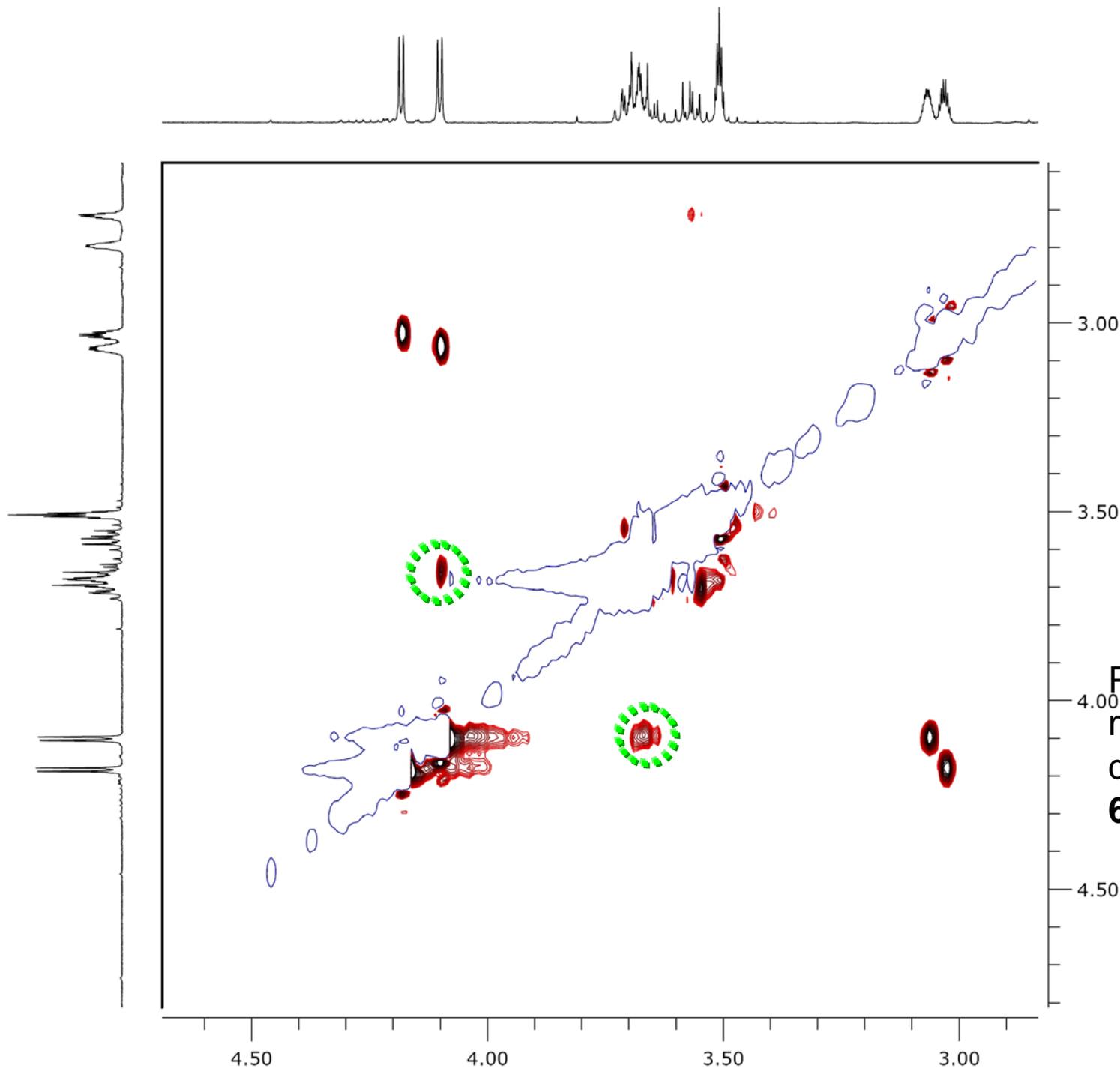


dichloroolefin Pure

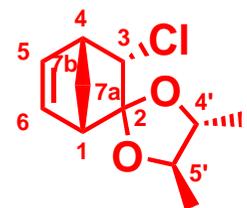
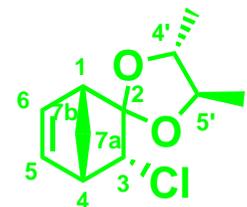
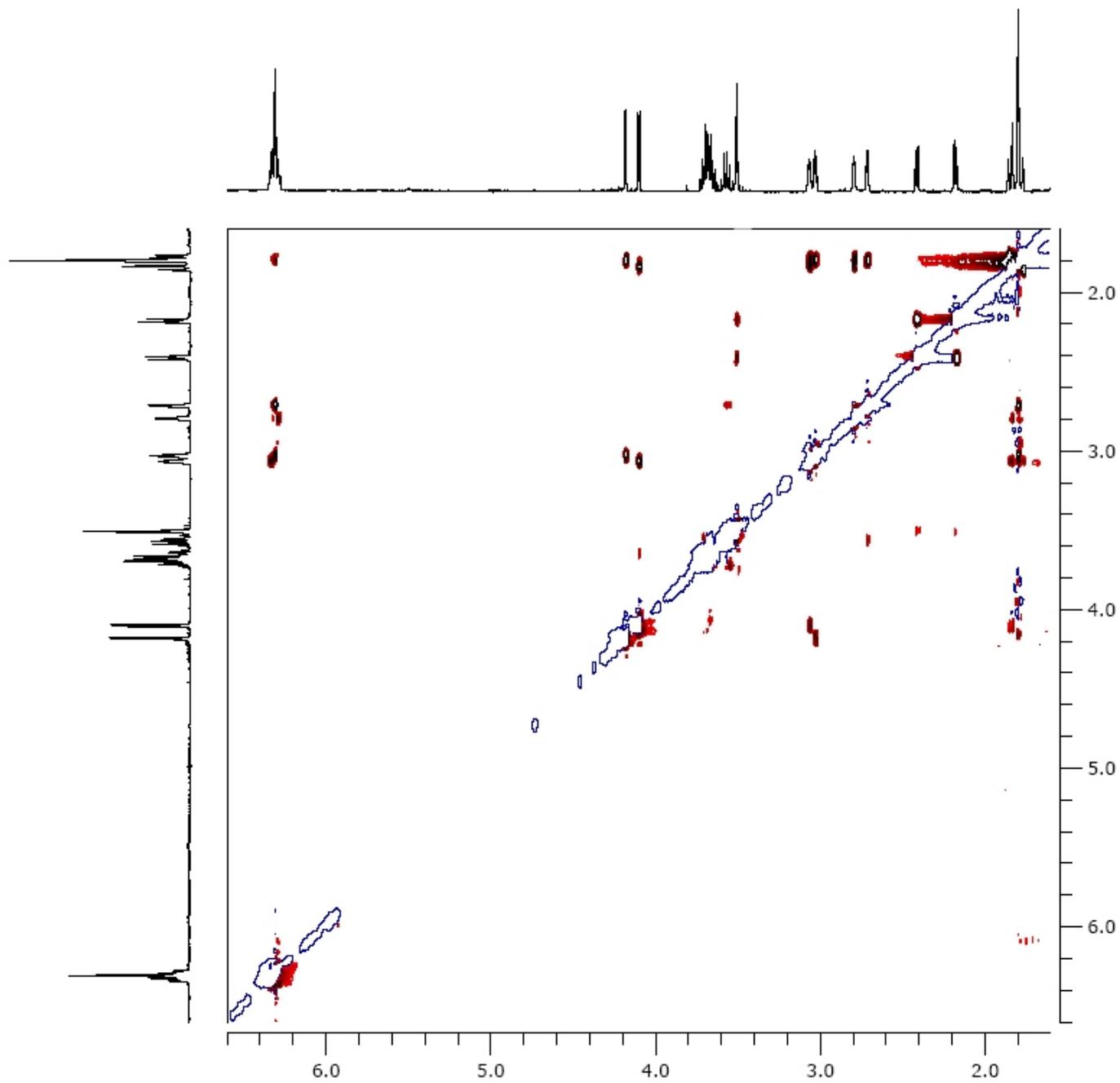


Crude Reaction



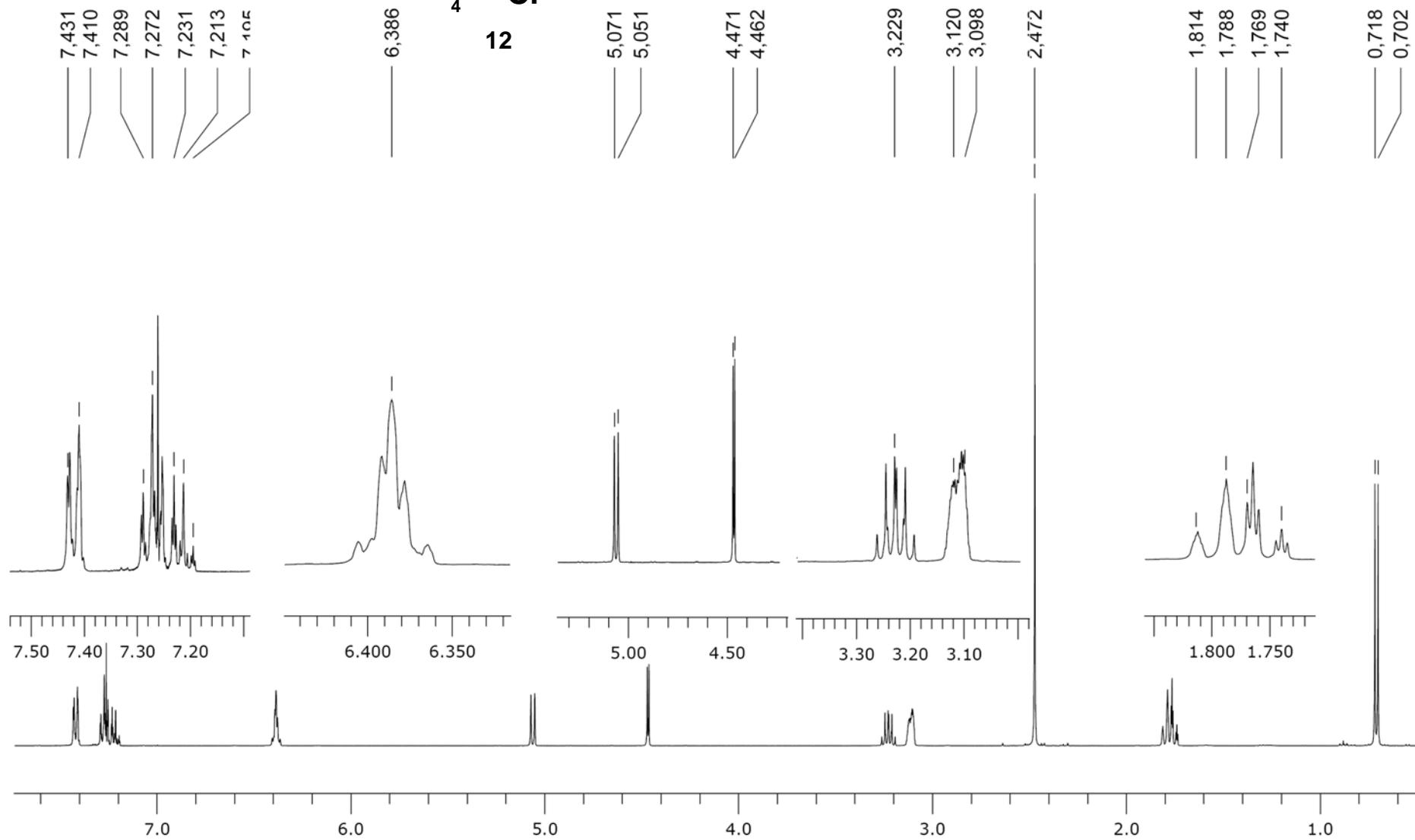
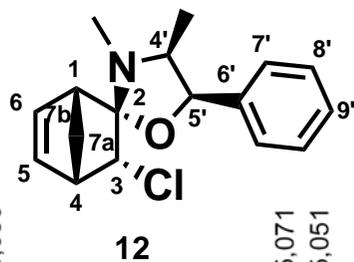


Portion of NOESY of mixture diastereoisomers of **6d**

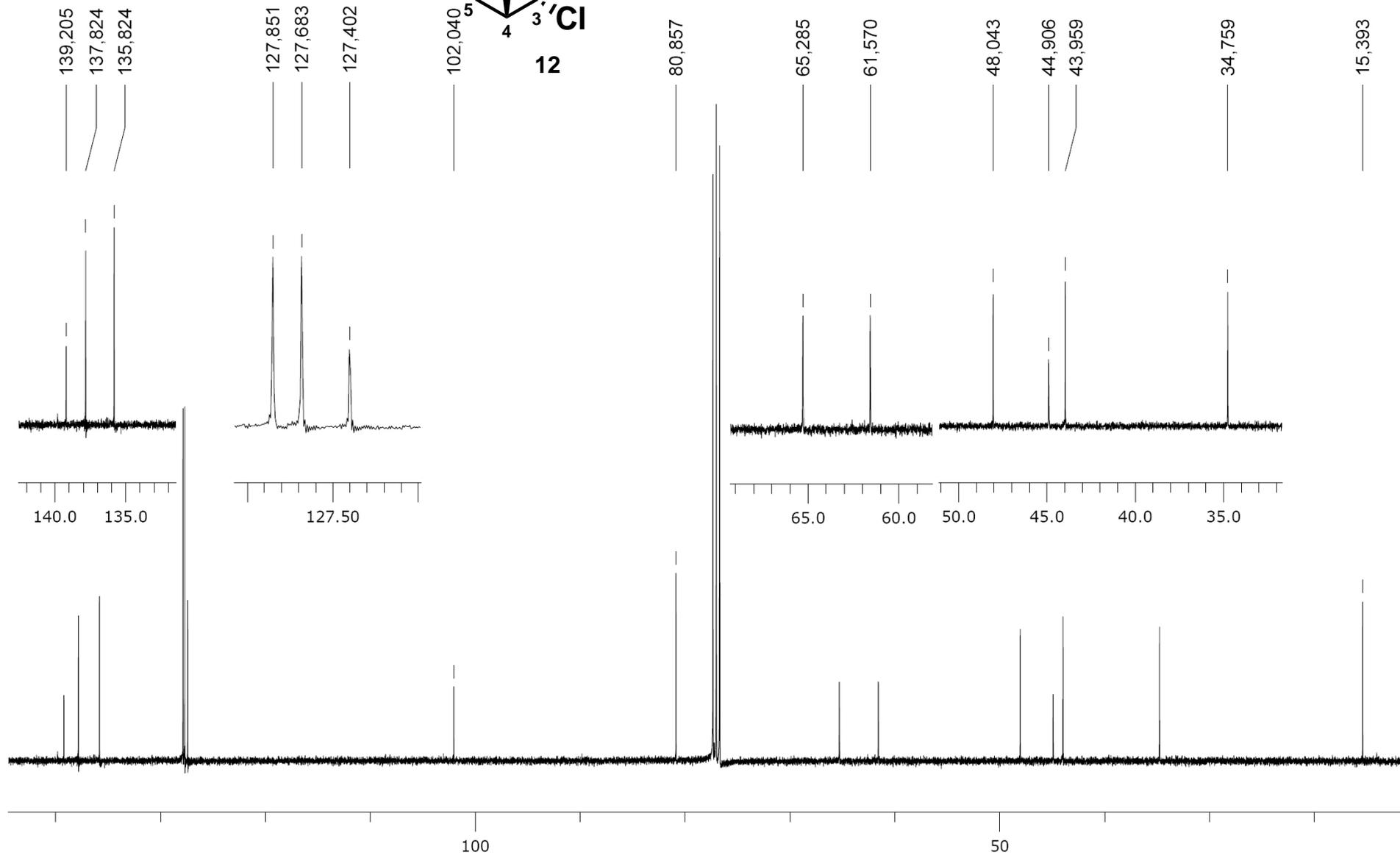
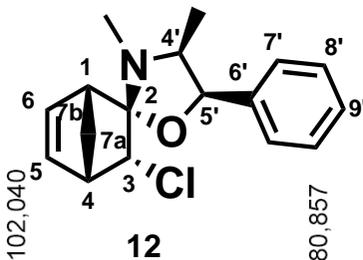


NOESY of mixture
diastereoisomers of
6d

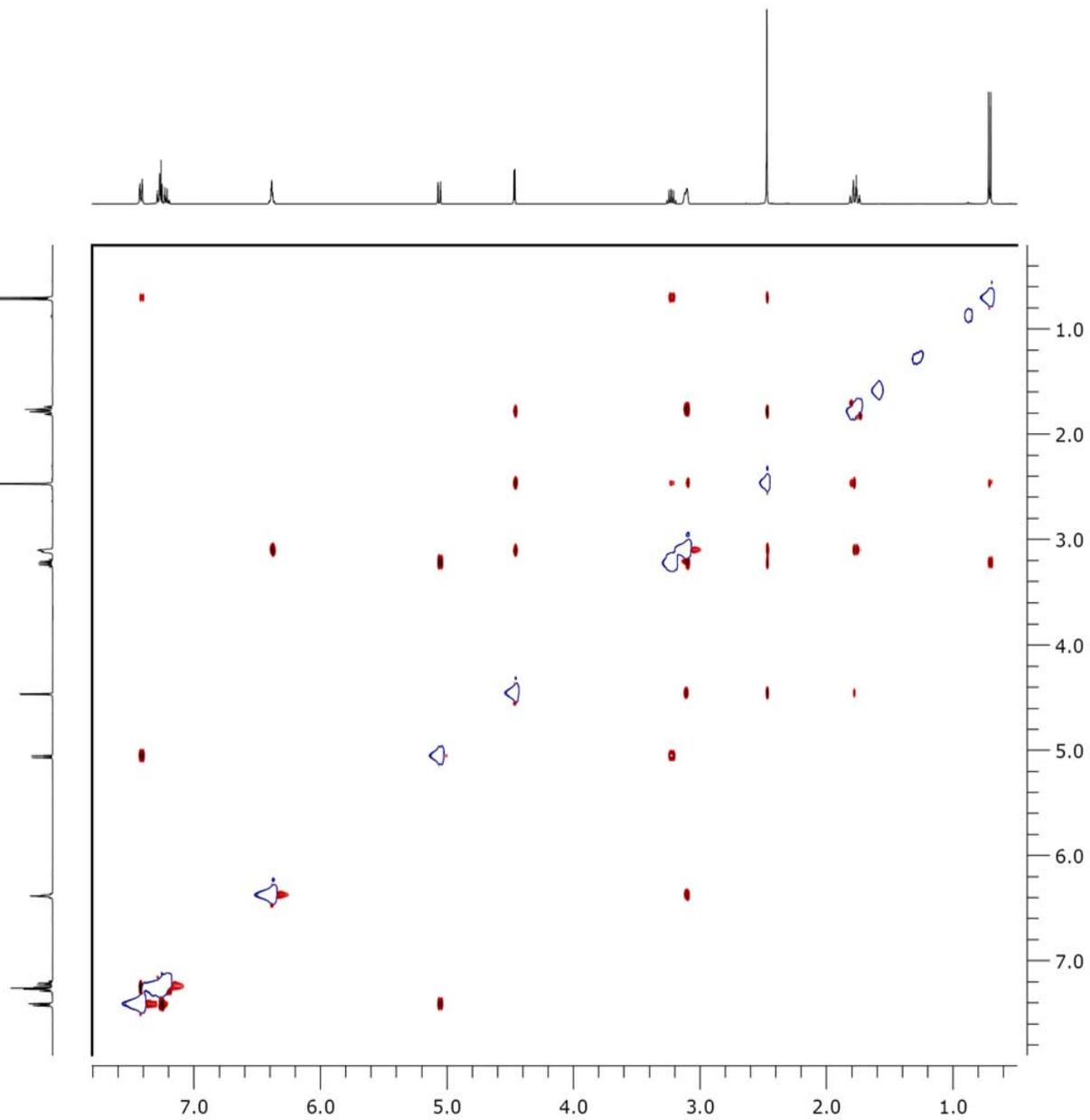
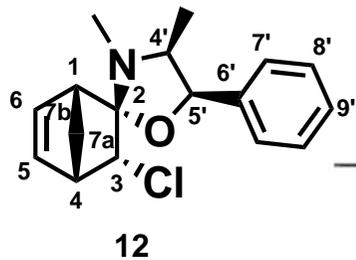
¹H NMR of 12



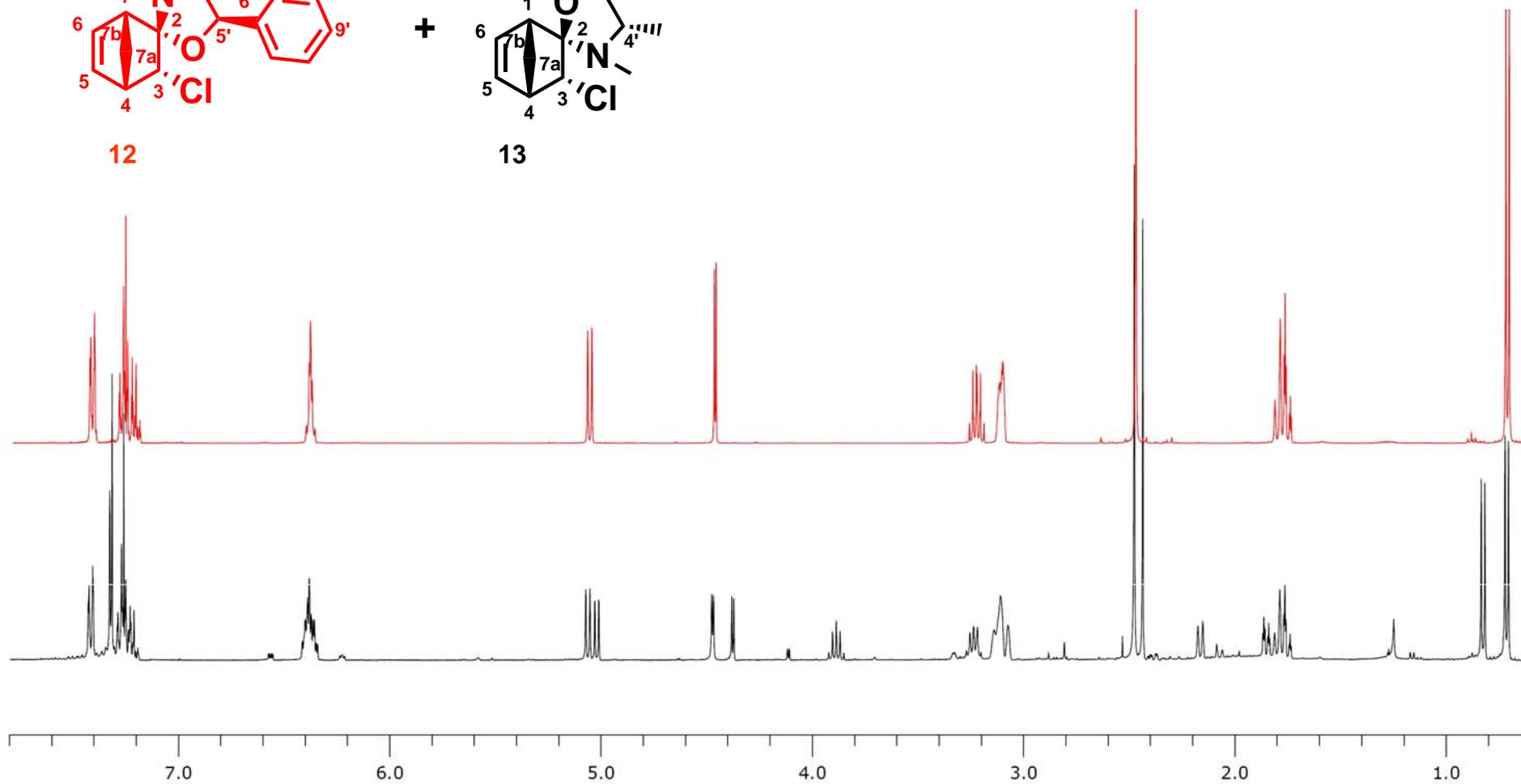
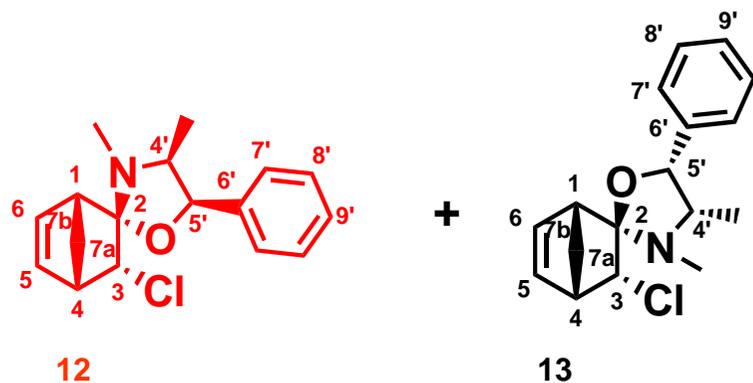
¹³C NMR of 12



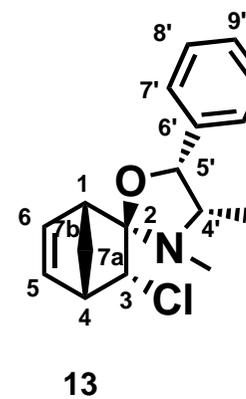
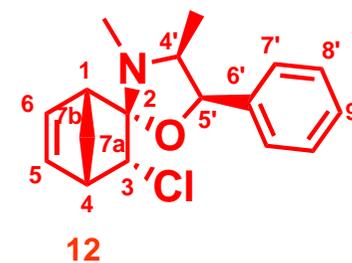
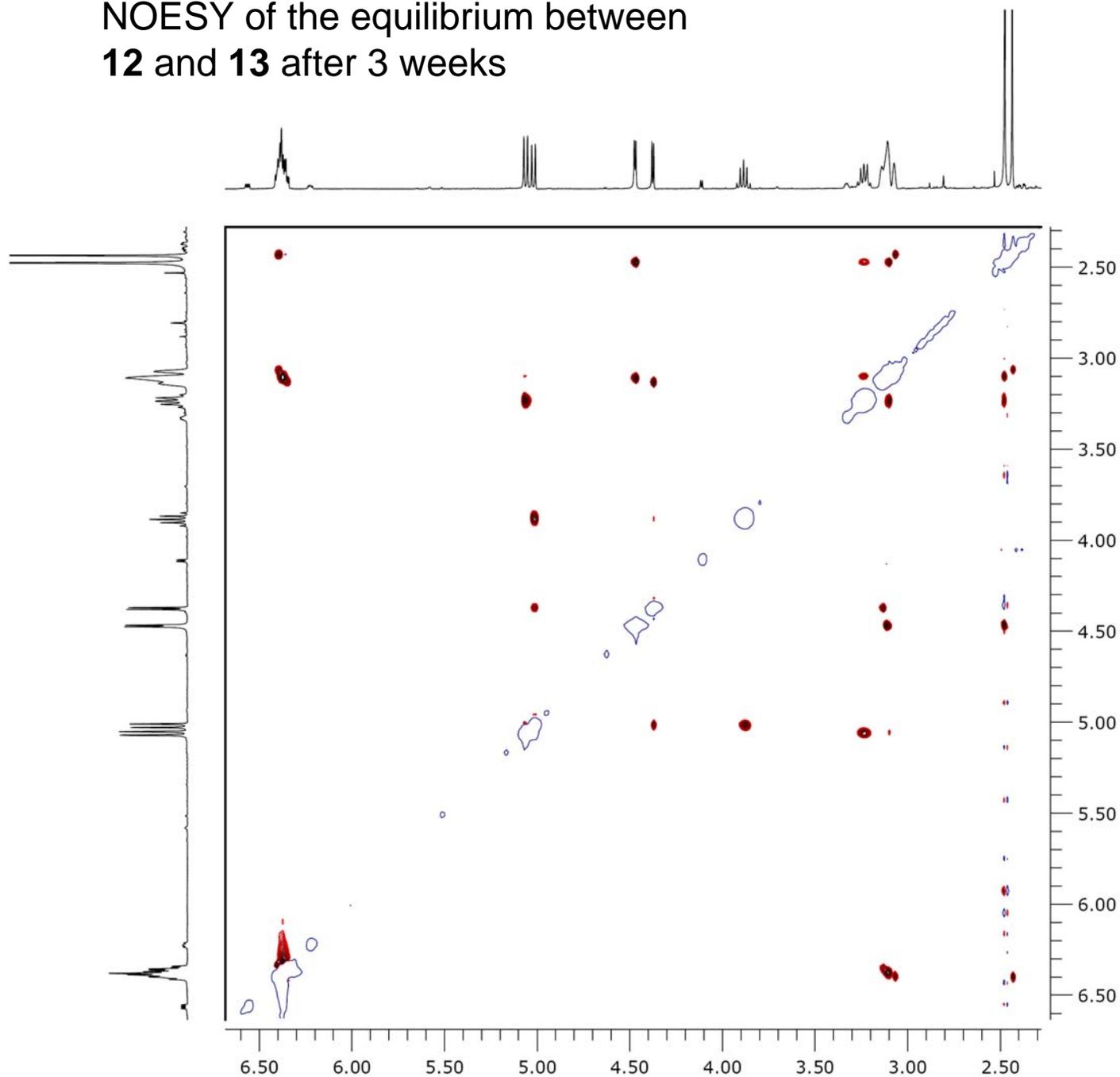
NOESY of 12



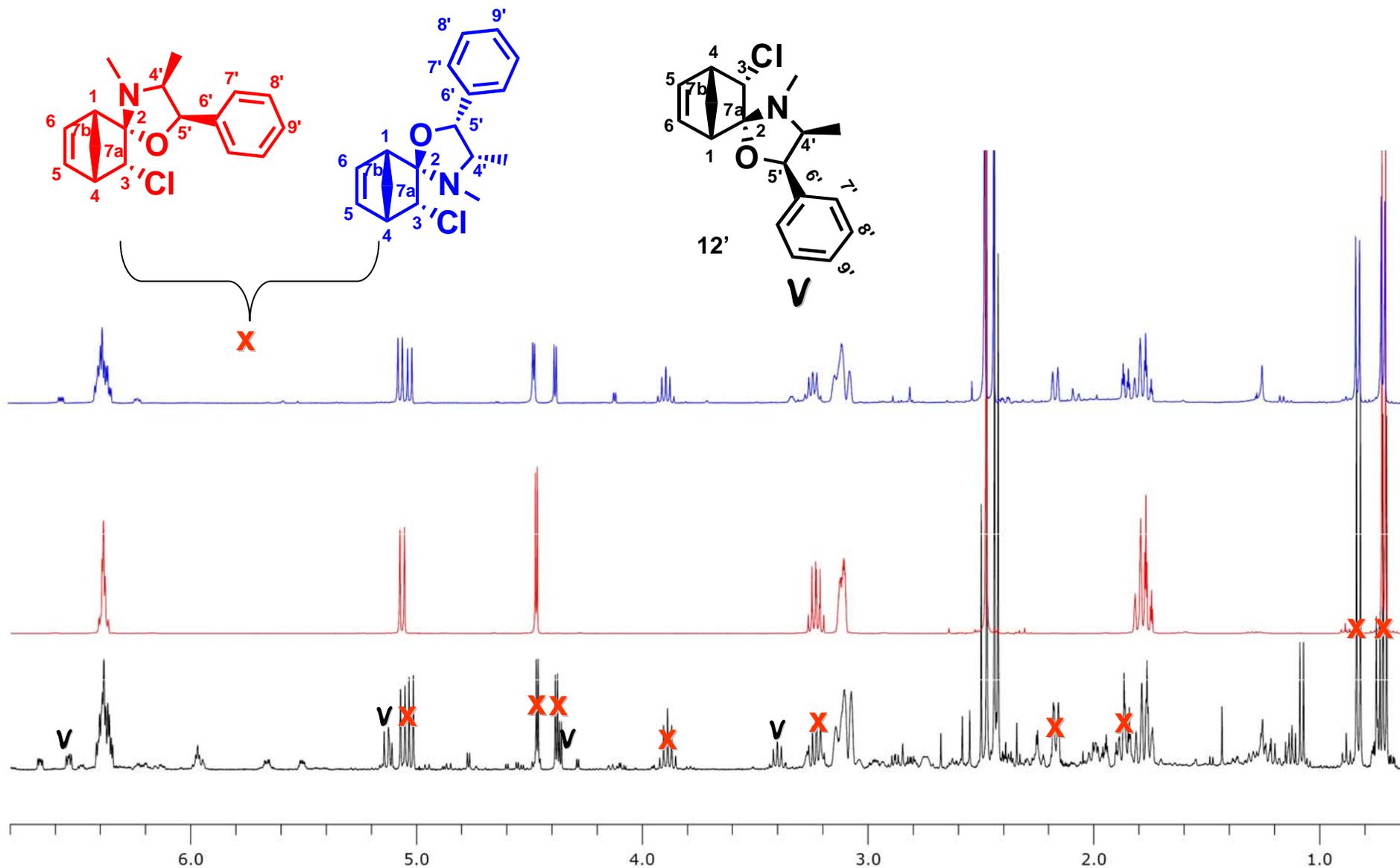
^1H NMR of the equilibrium between **12** and **13** after 3 weeks



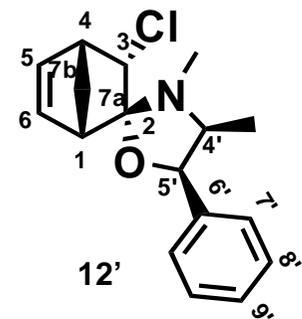
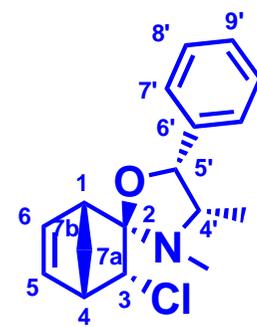
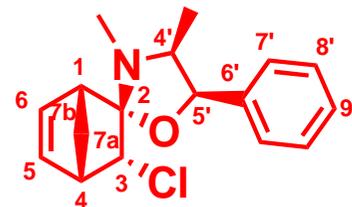
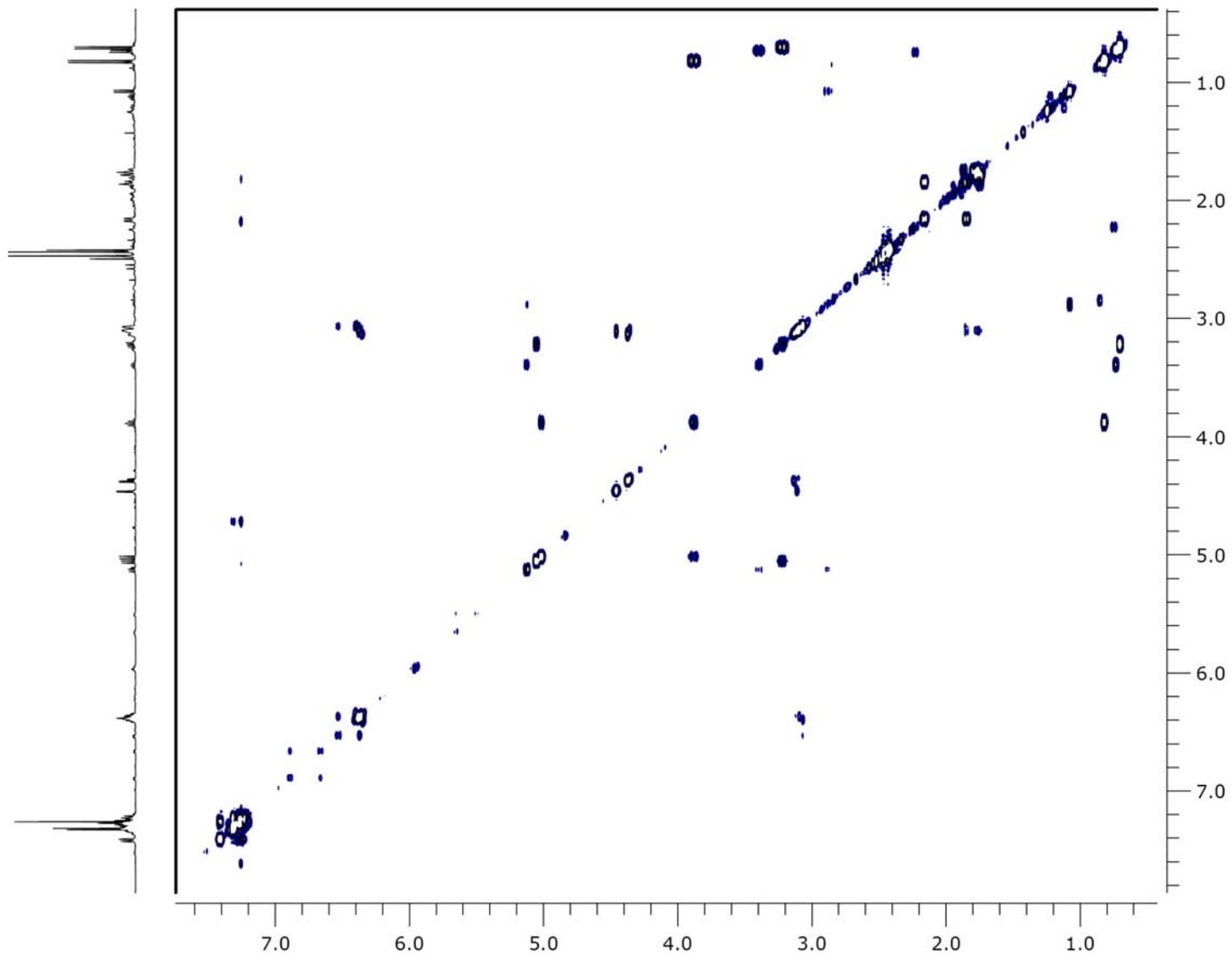
NOESY of the equilibrium between
12 and **13** after 3 weeks



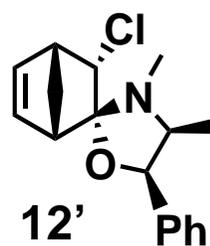
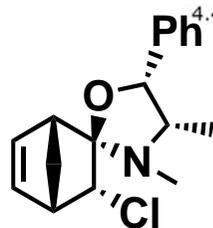
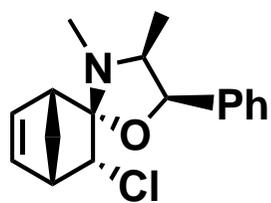
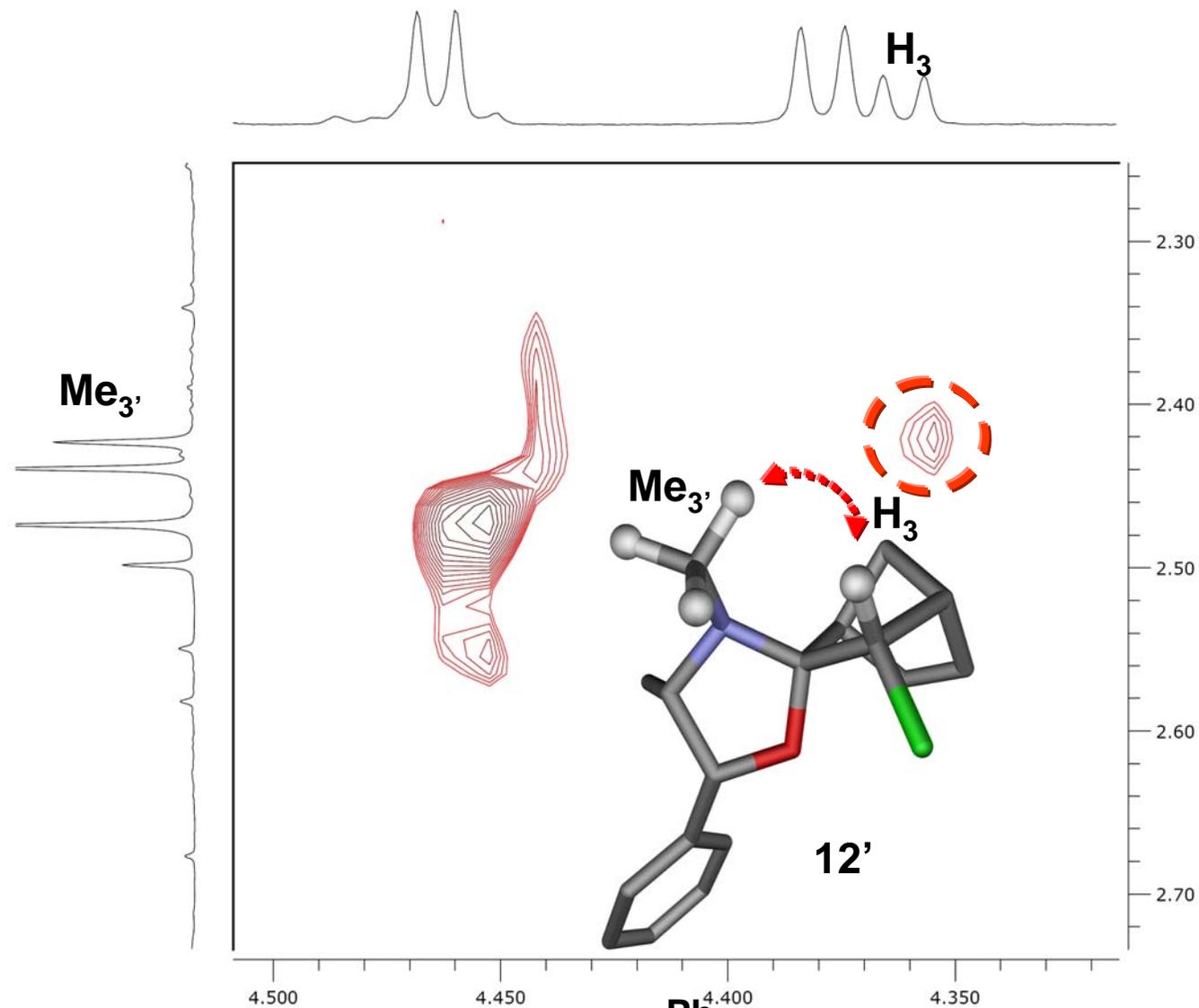
^1H NMR of the mother liquor of the crystallization process, enriched in **12'**



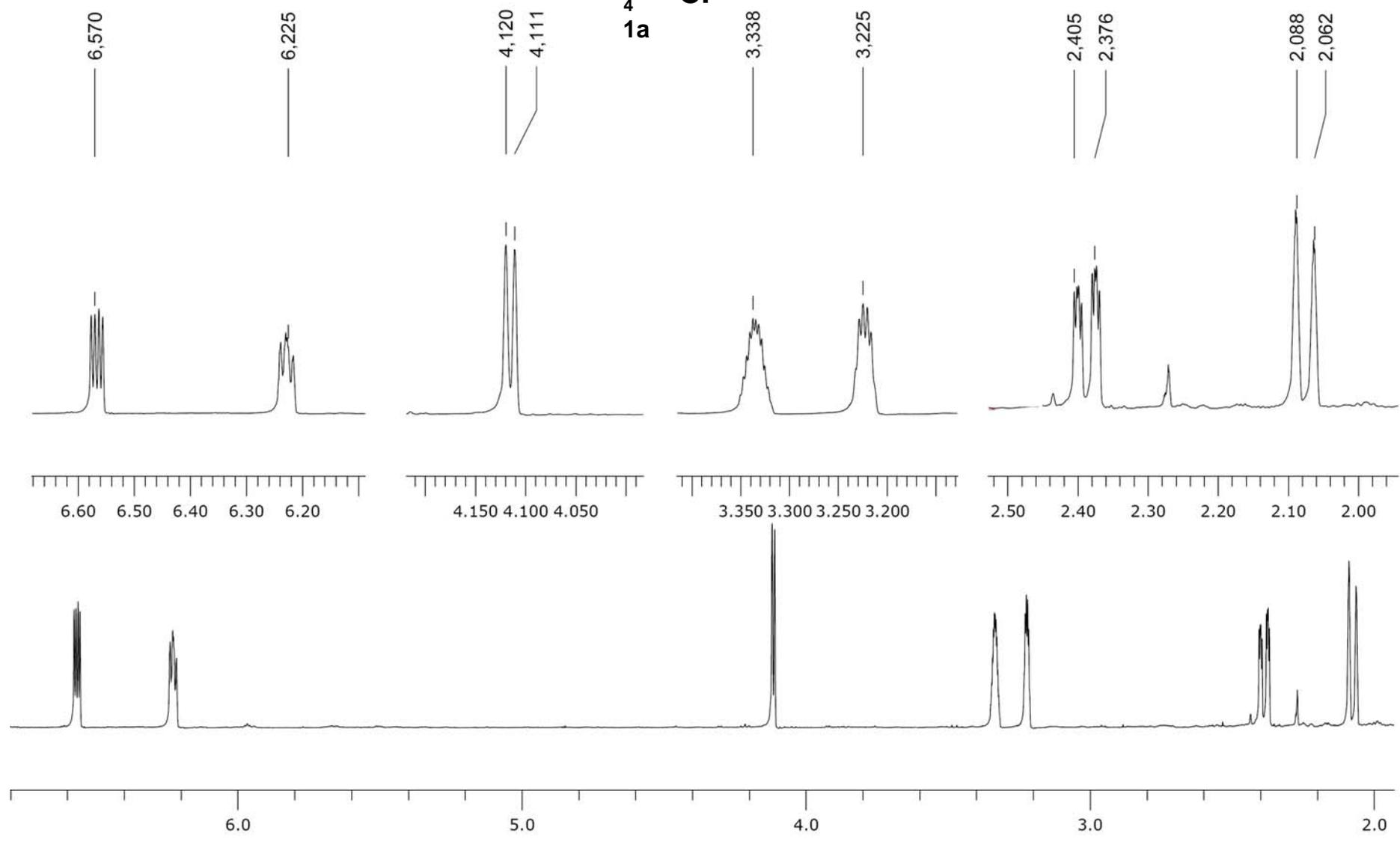
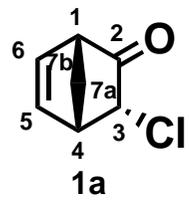
COSY of the mother liquor of the crystallization process, enriched in **12'**



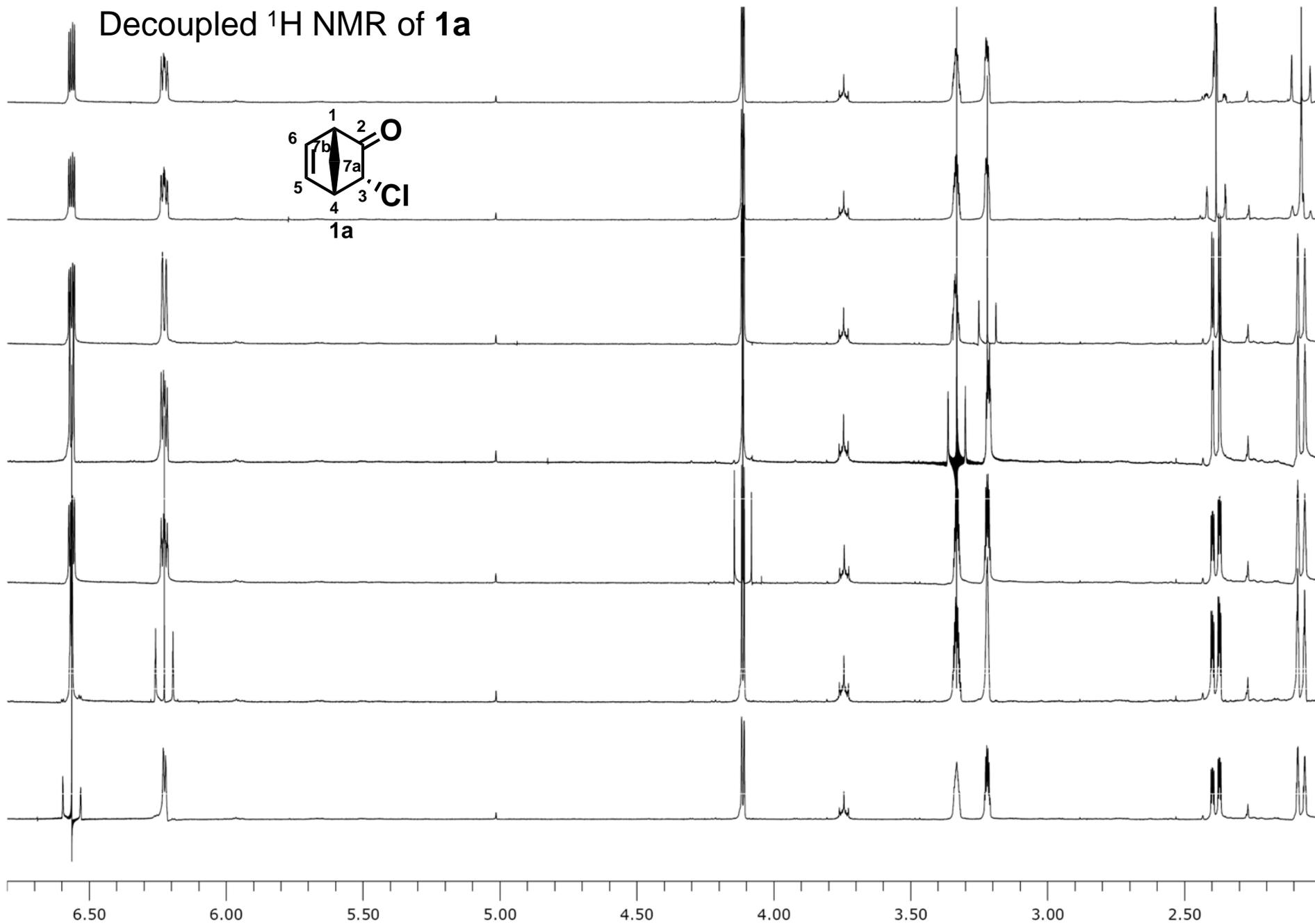
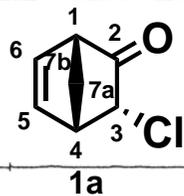
Portion of NOESY of the mother liquor of the crystallization process, enriched in **12'**



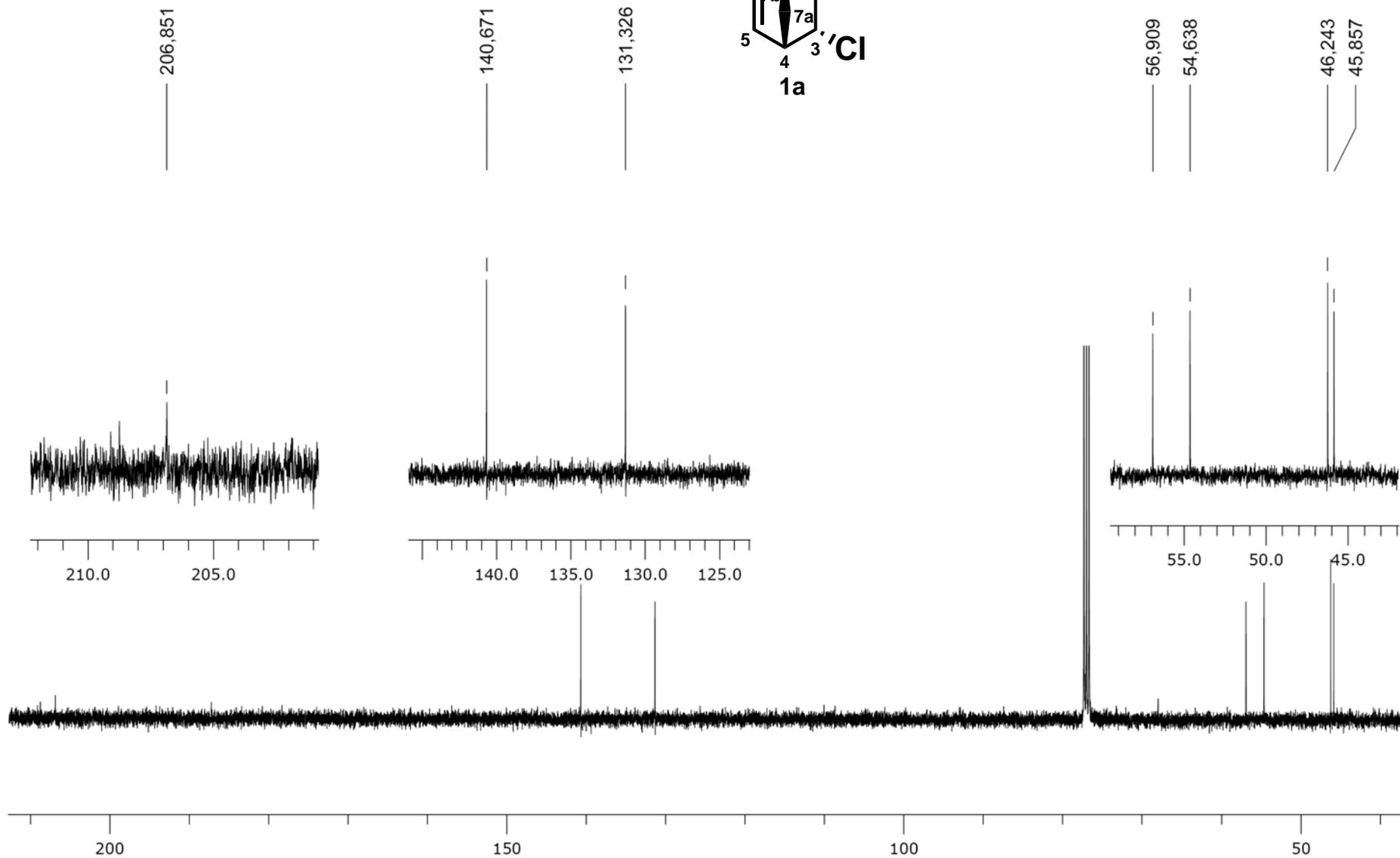
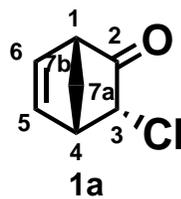
^1H NMR of **1a**



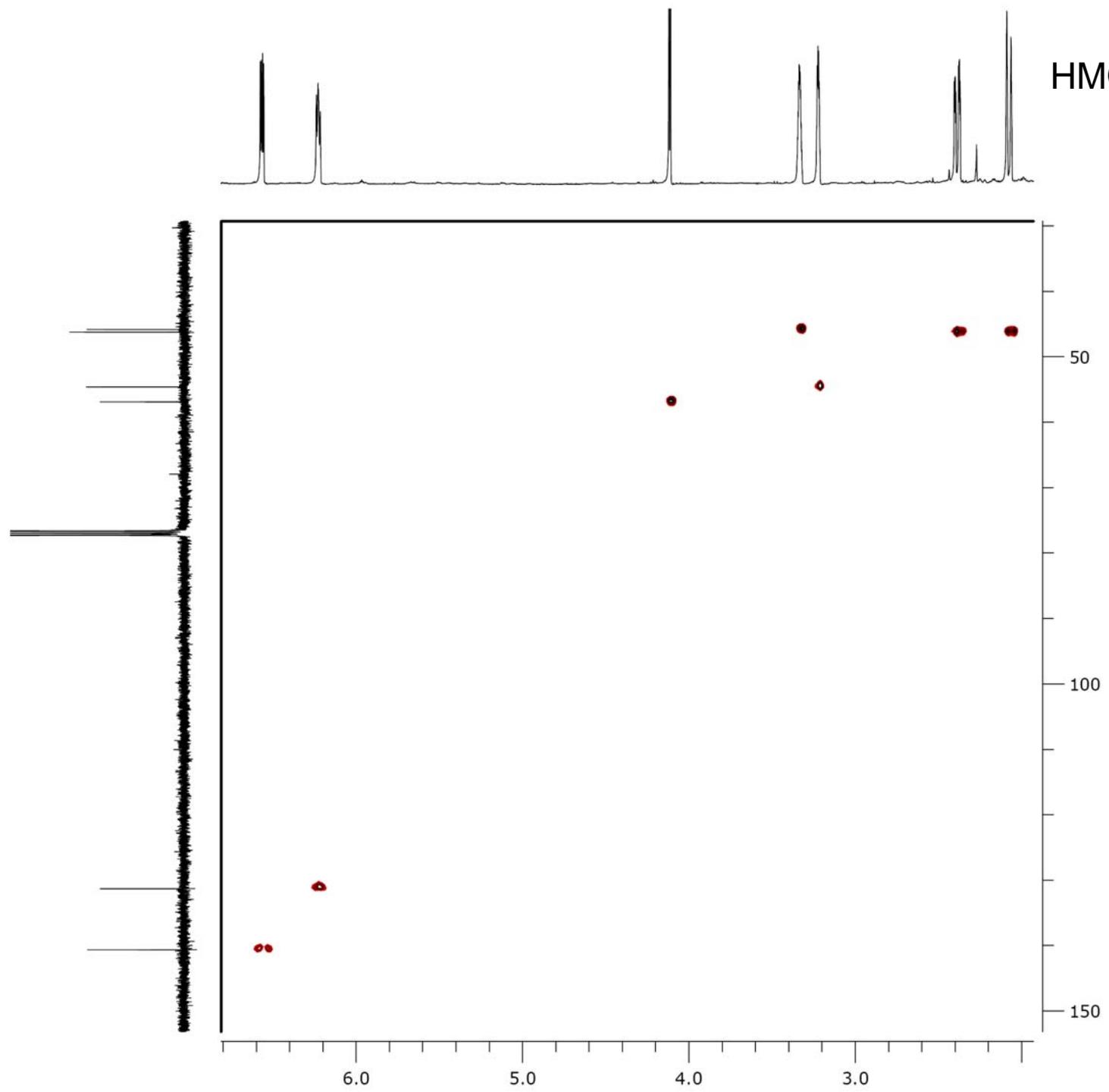
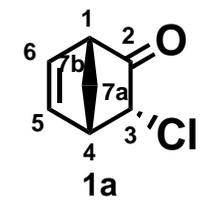
Decoupled ^1H NMR of **1a**



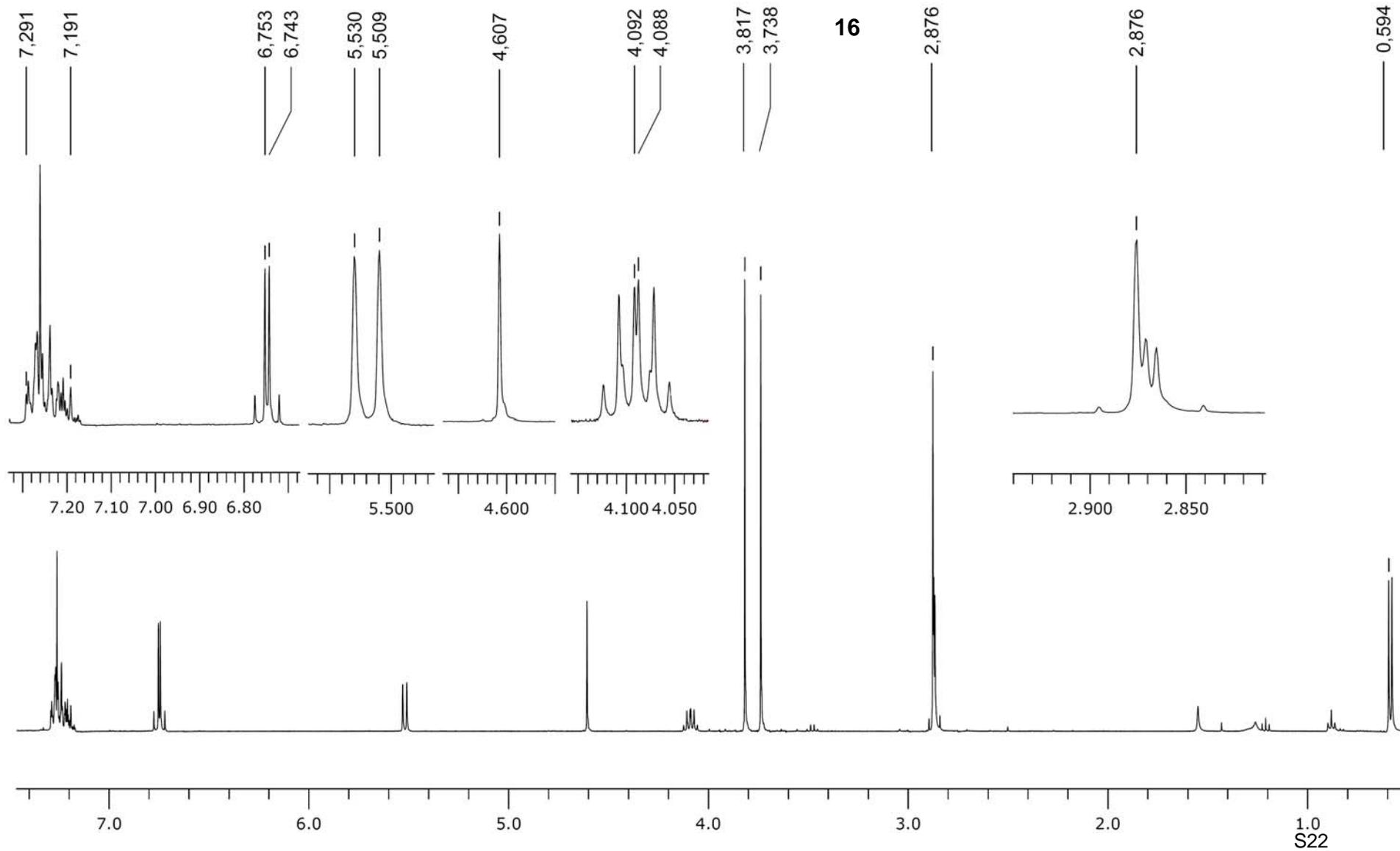
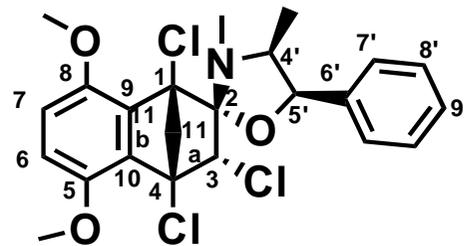
^{13}C NMR of **1a**



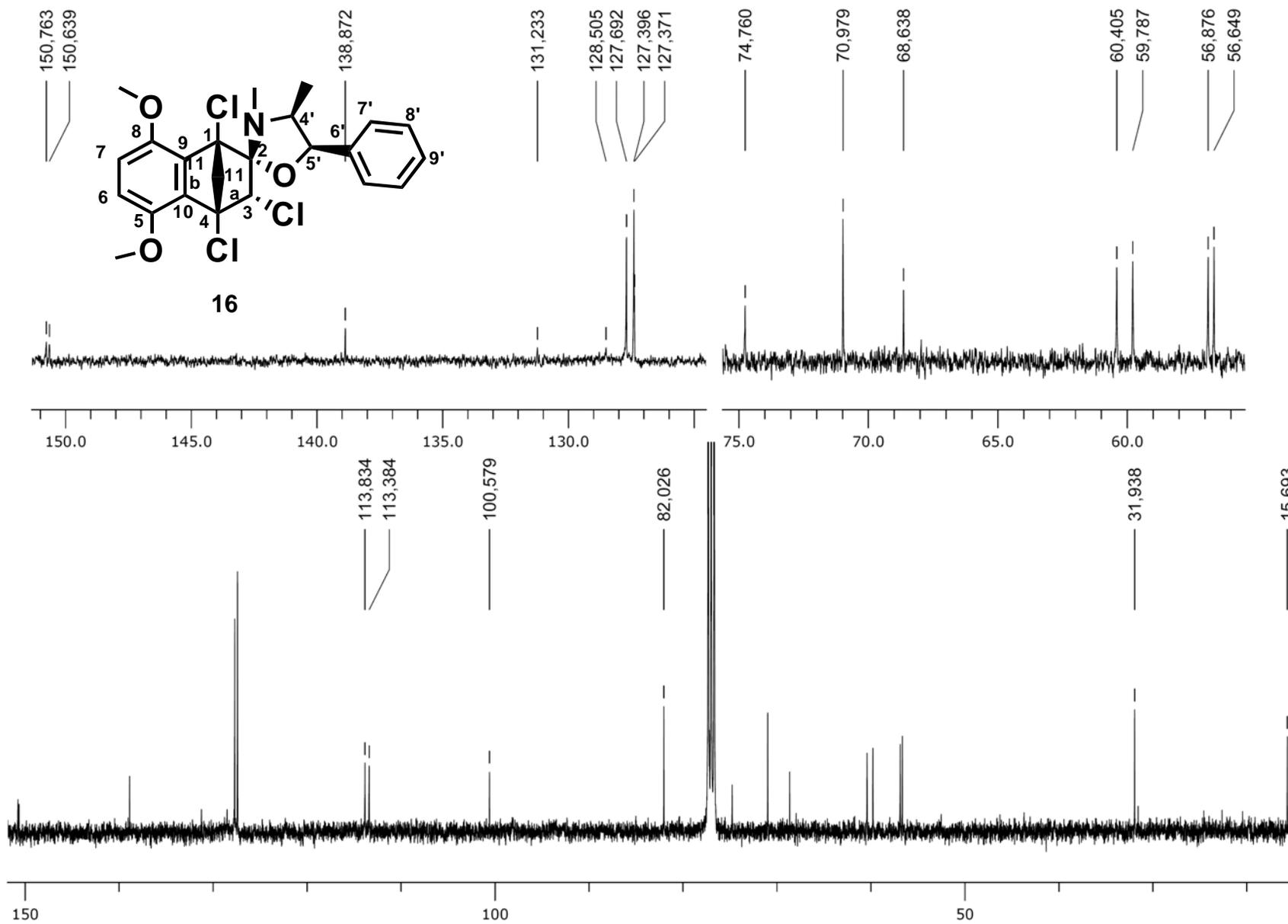
HMQC of 1a



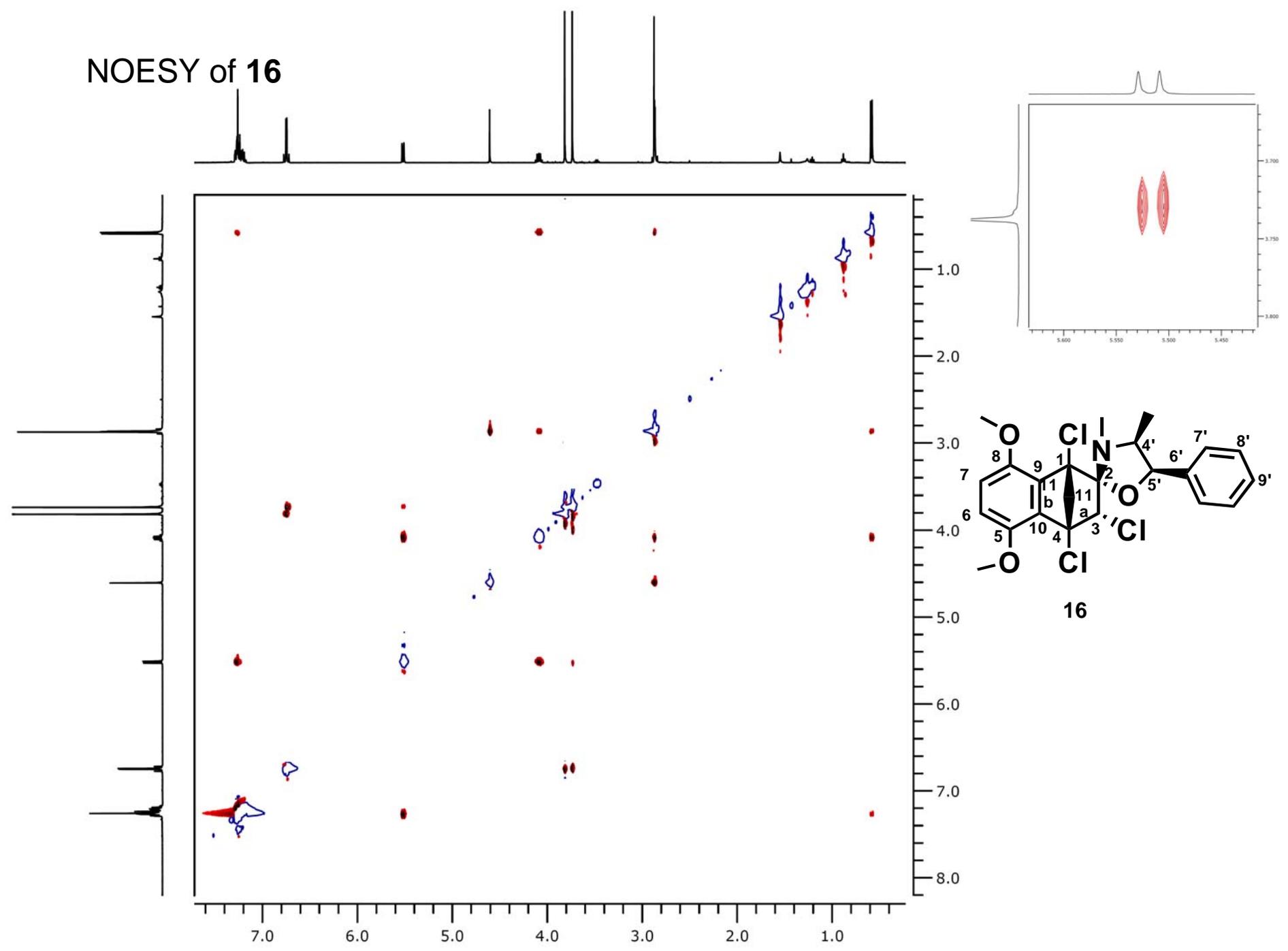
¹H NMR of **16**



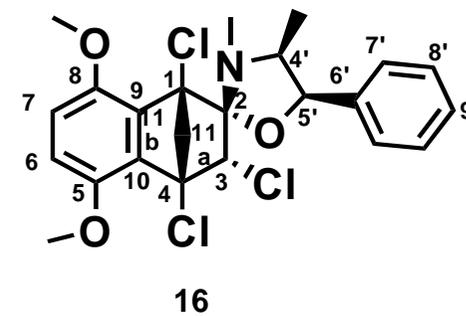
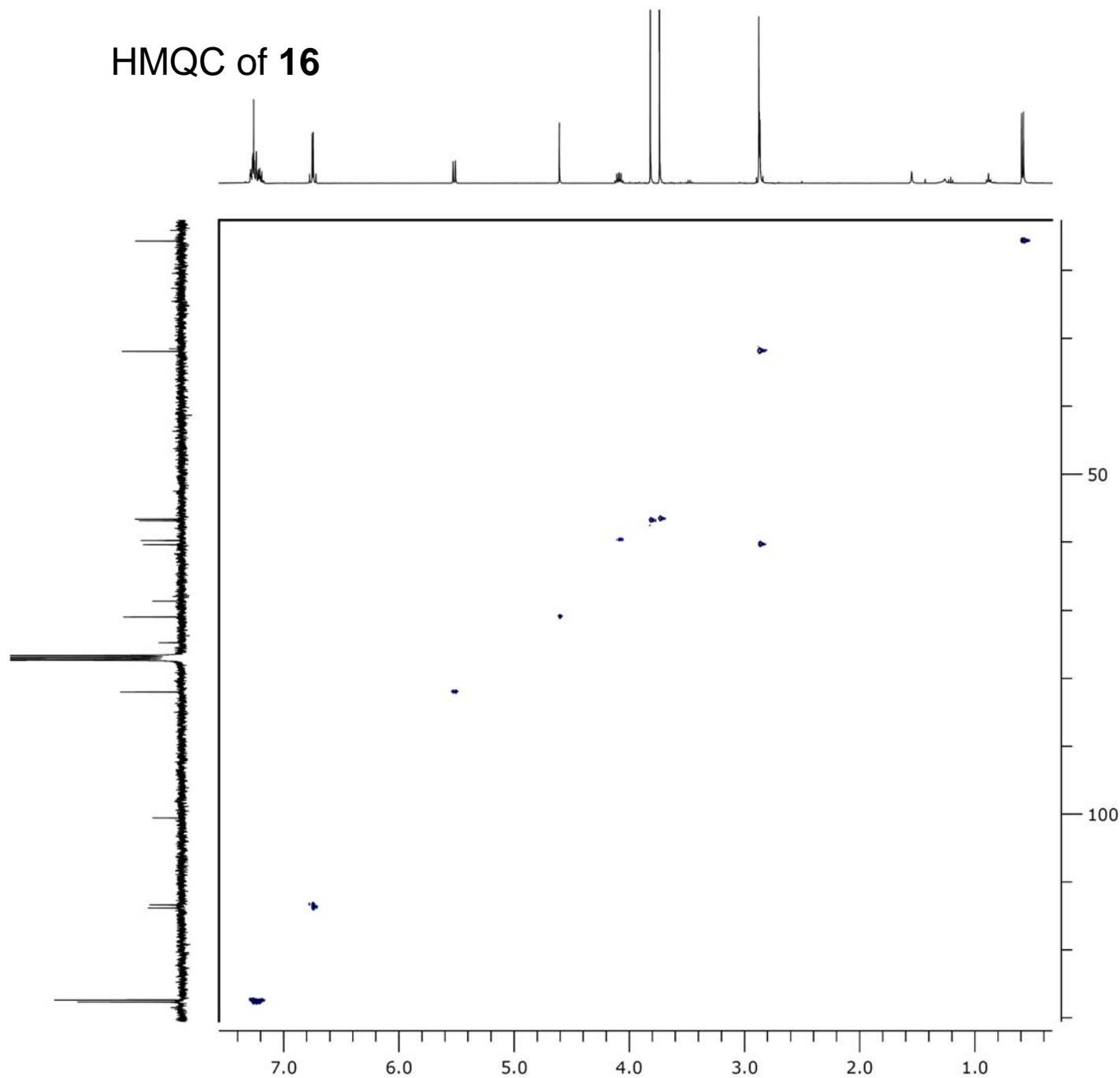
^{13}C NMR of 16



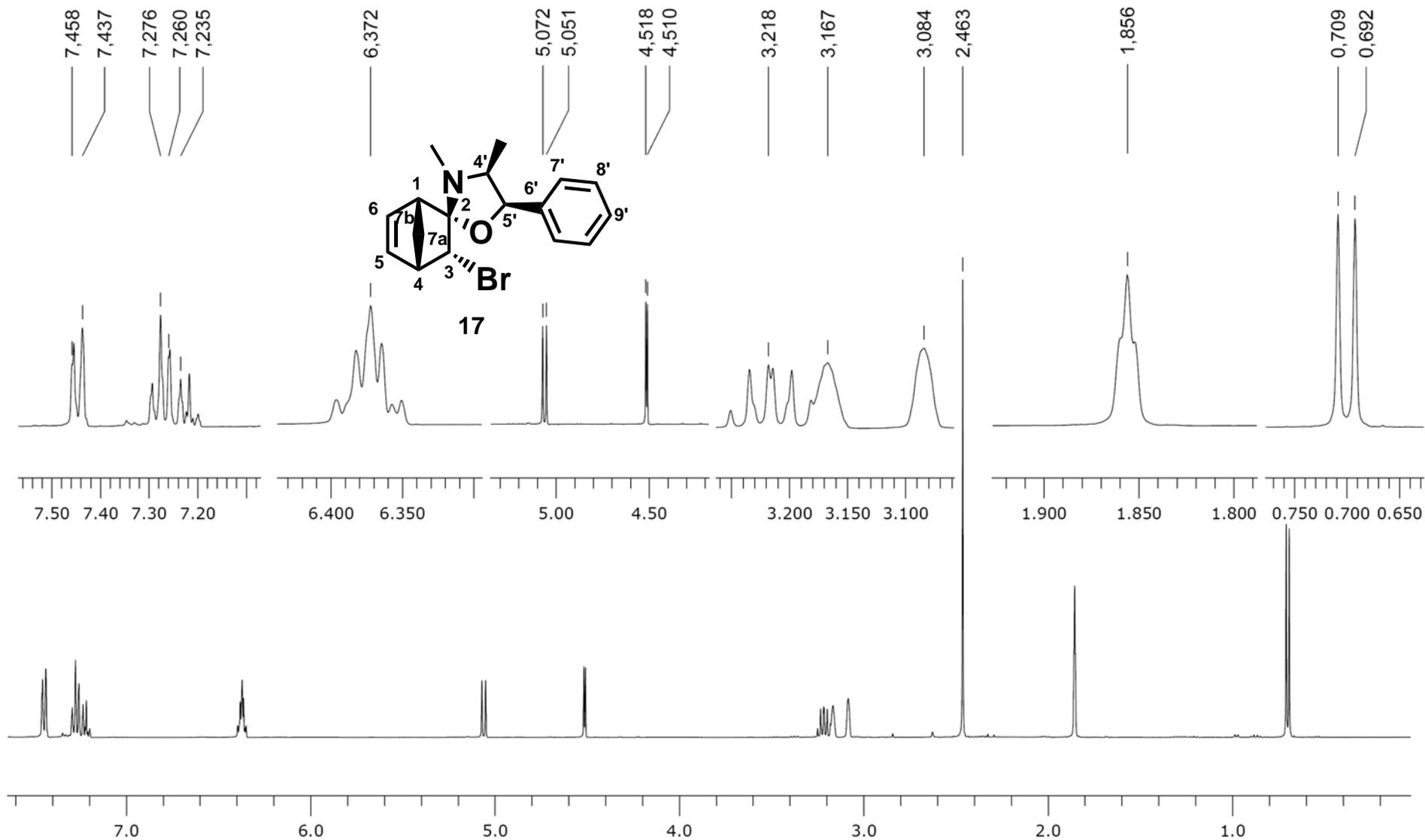
NOESY of 16



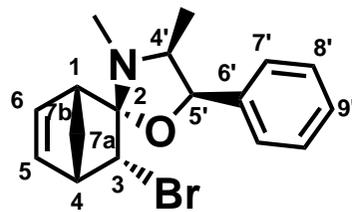
HMQC of 16



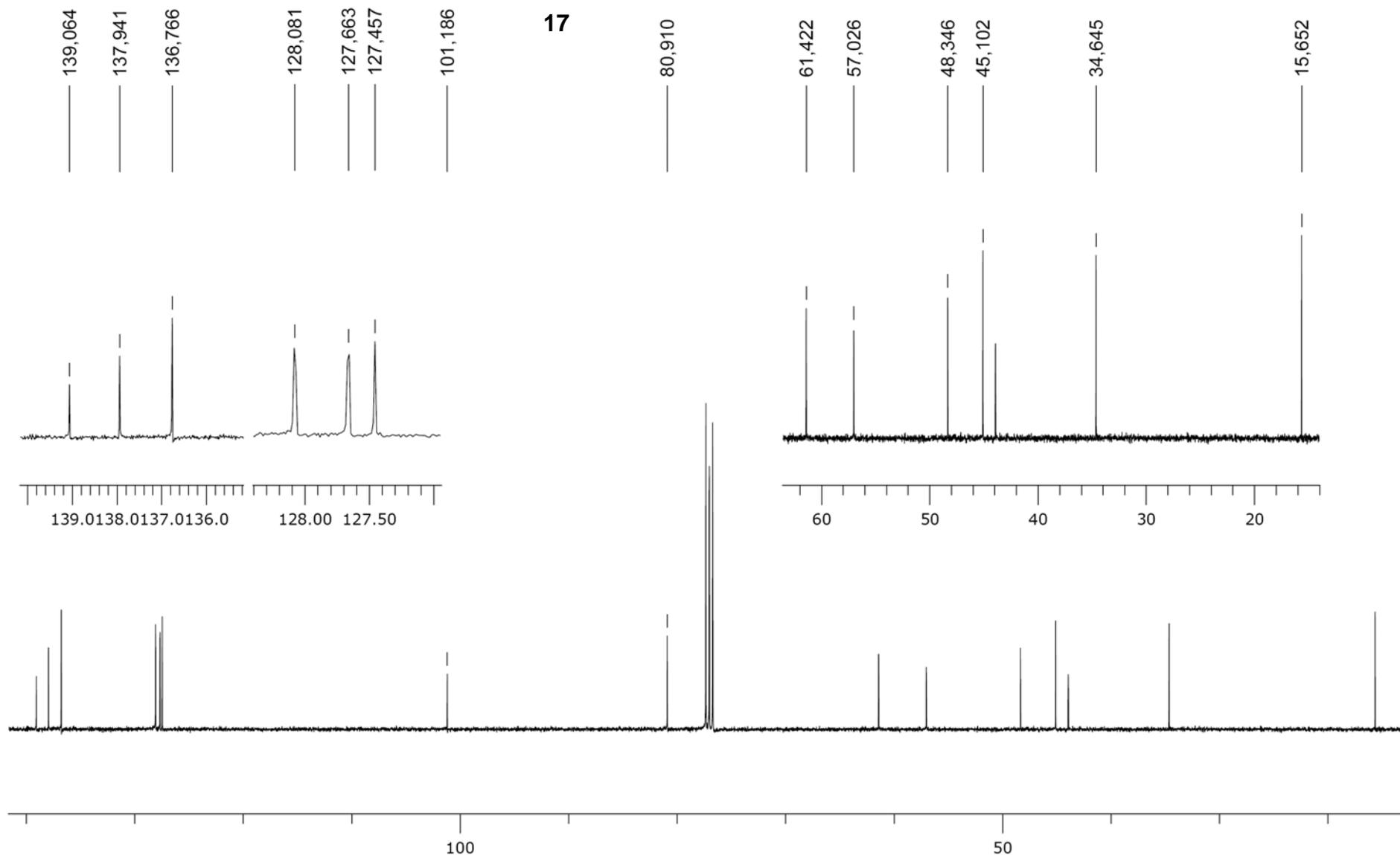
¹H NMR of 17



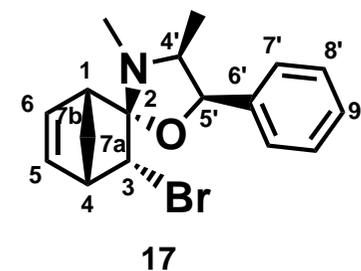
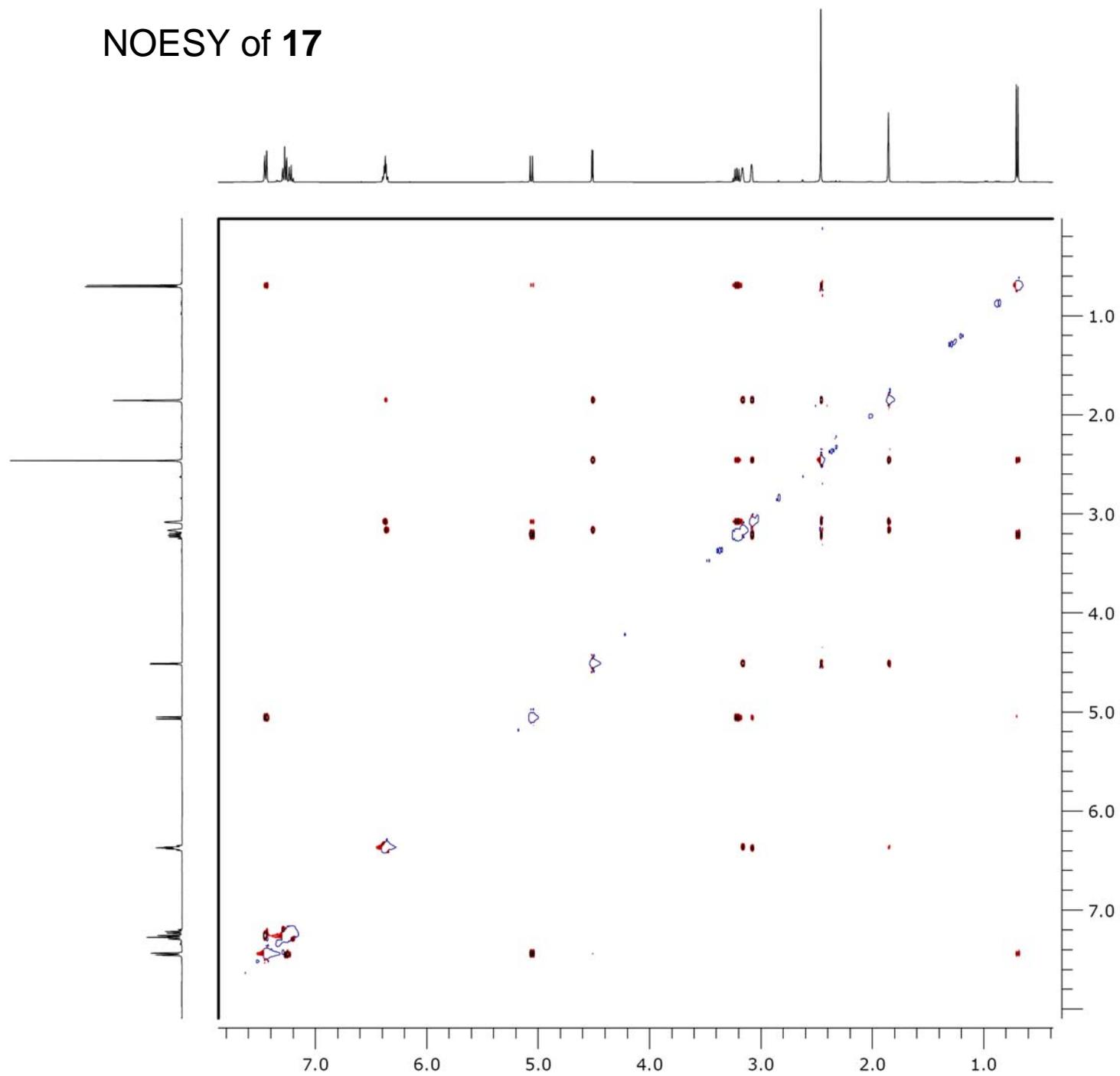
^{13}C NMR of **17**



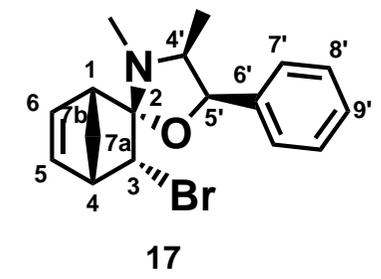
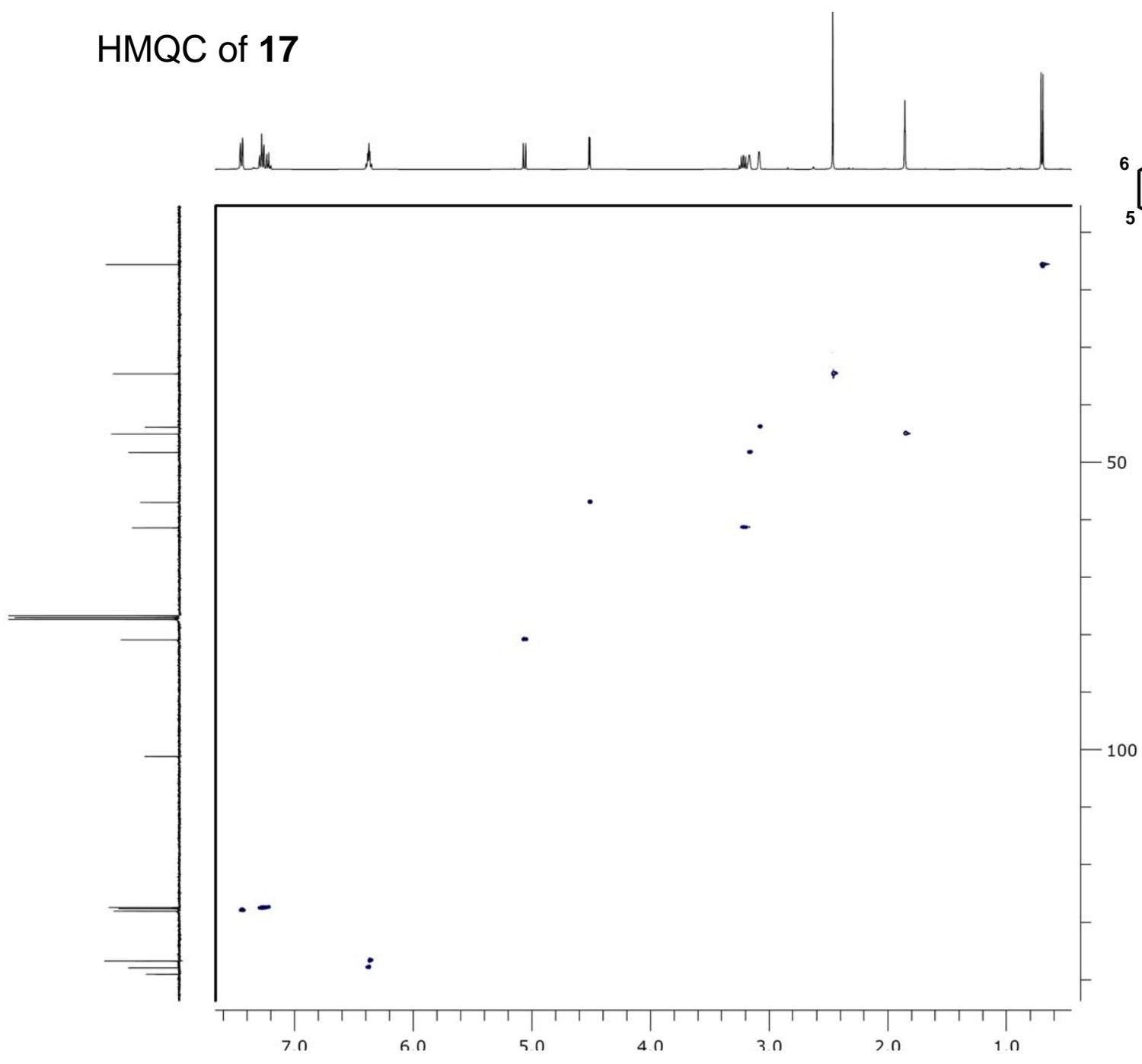
17



NOESY of 17



HMQC of 17



6,309
6,269

4,771
4,763

4,191
4,184

3,536
3,463

3,228

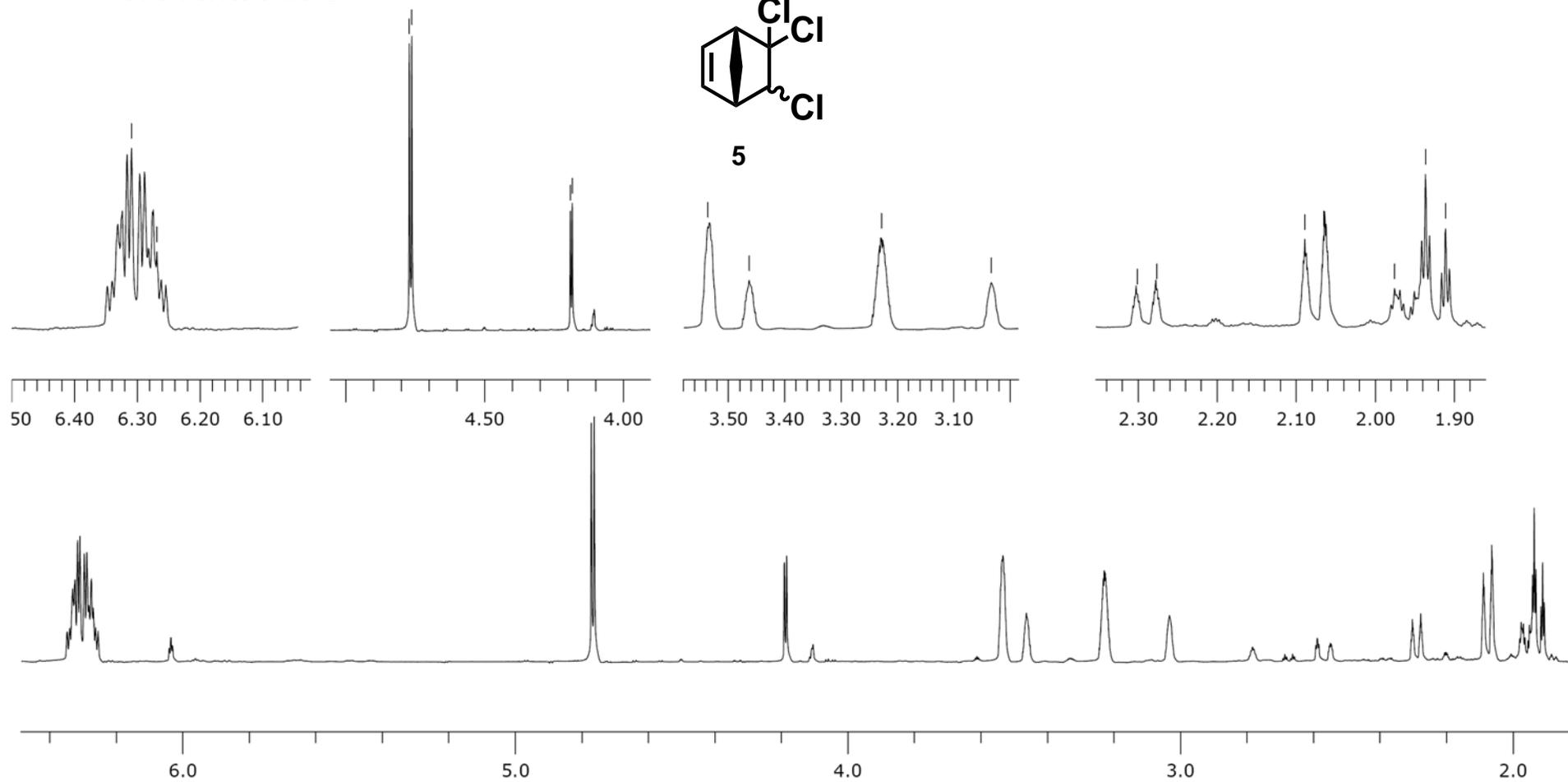
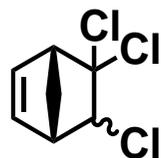
3,033

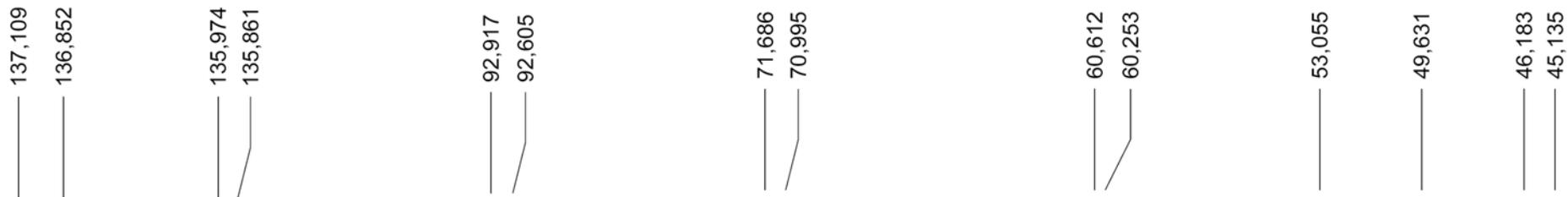
2,301
2,276

2,089
2,065

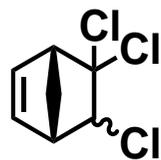
1,975
1,936
1,911

^1H NMR of **5**

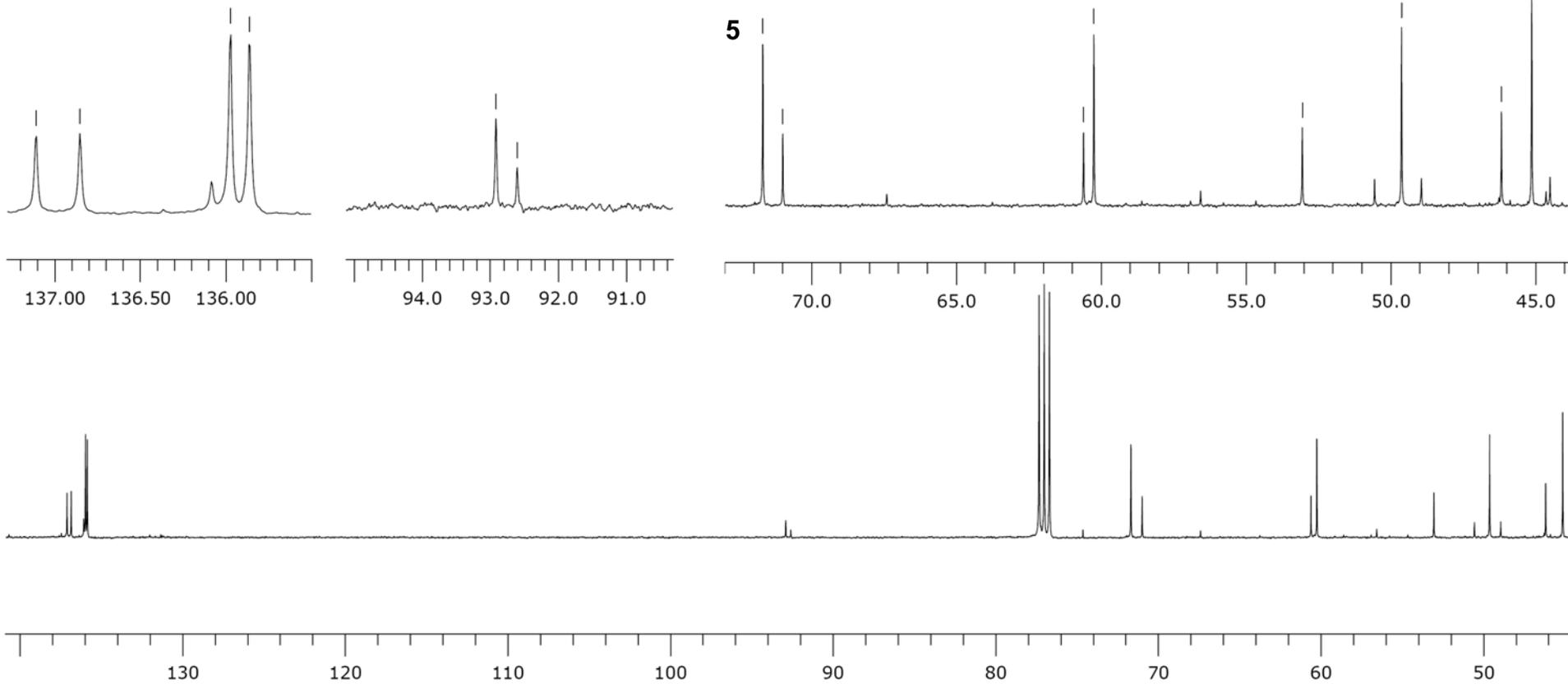


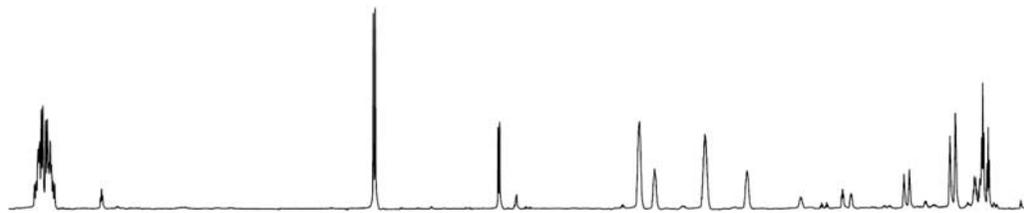


13C NMR of 5

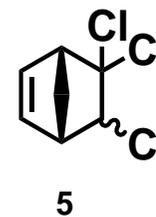
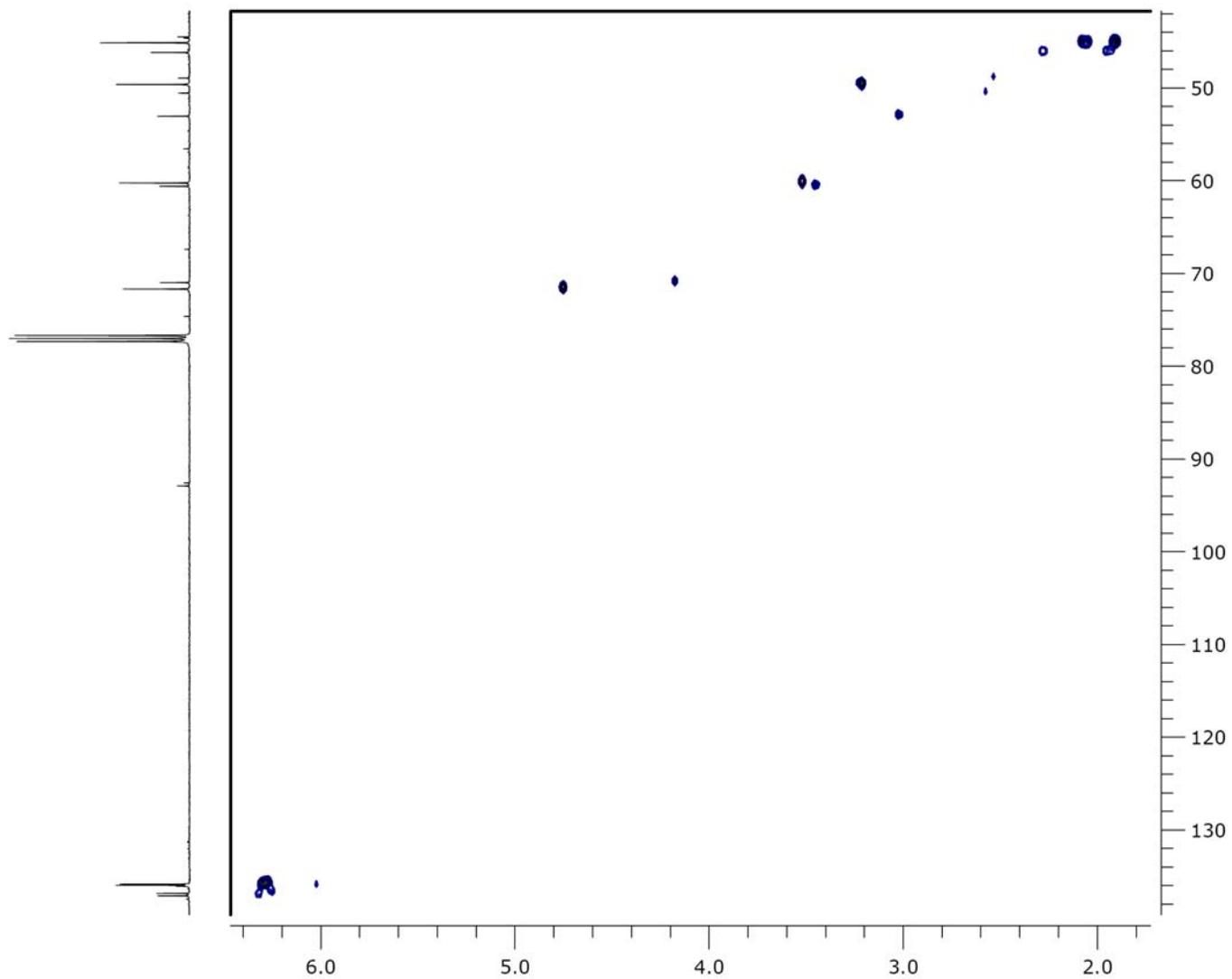


5

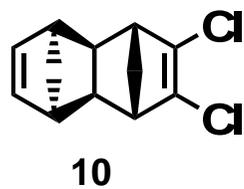




HMQC of 5

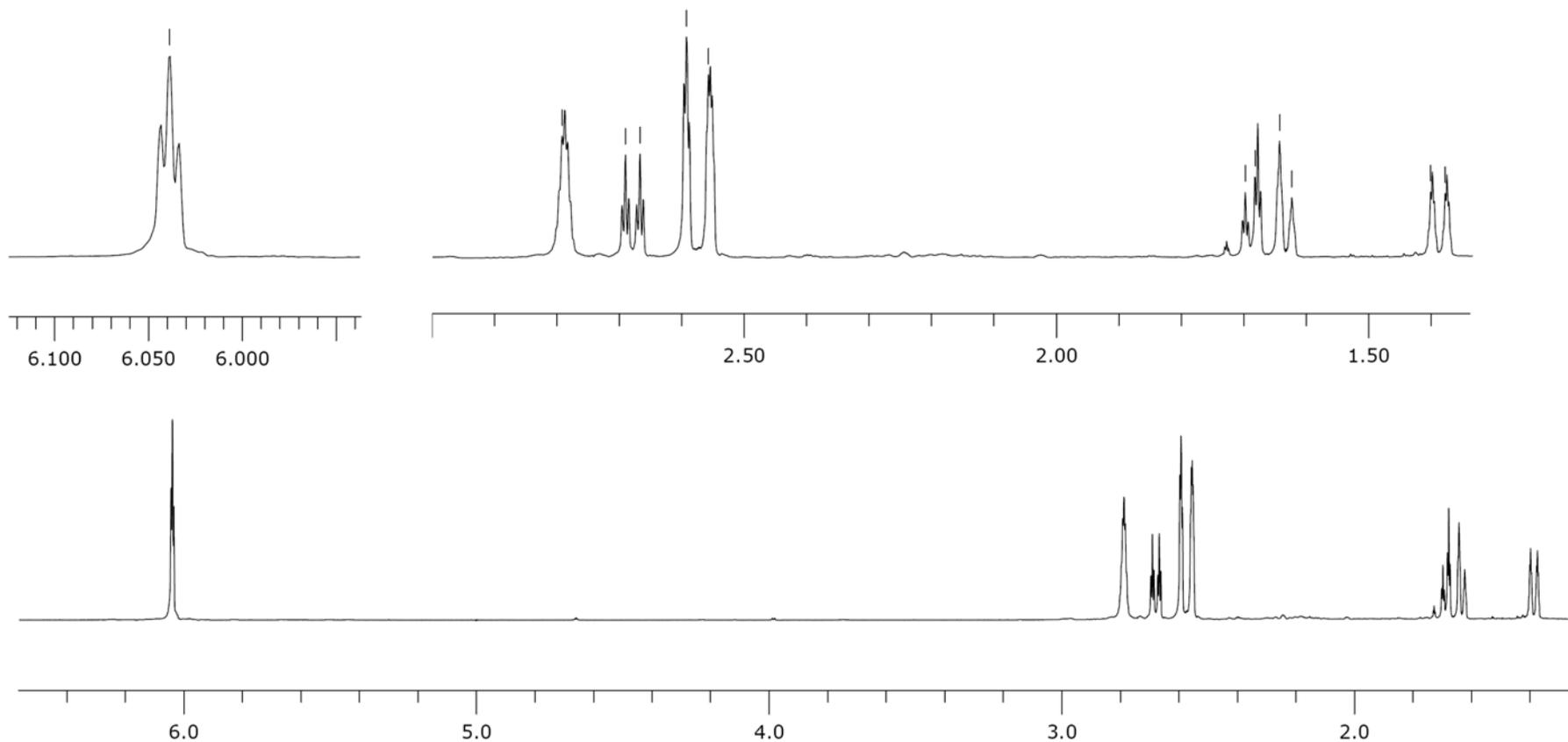


1H NMR of **10**

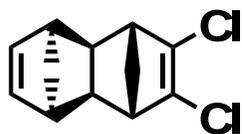


6,039
2,791
2,690
2,667
2,592
2,557

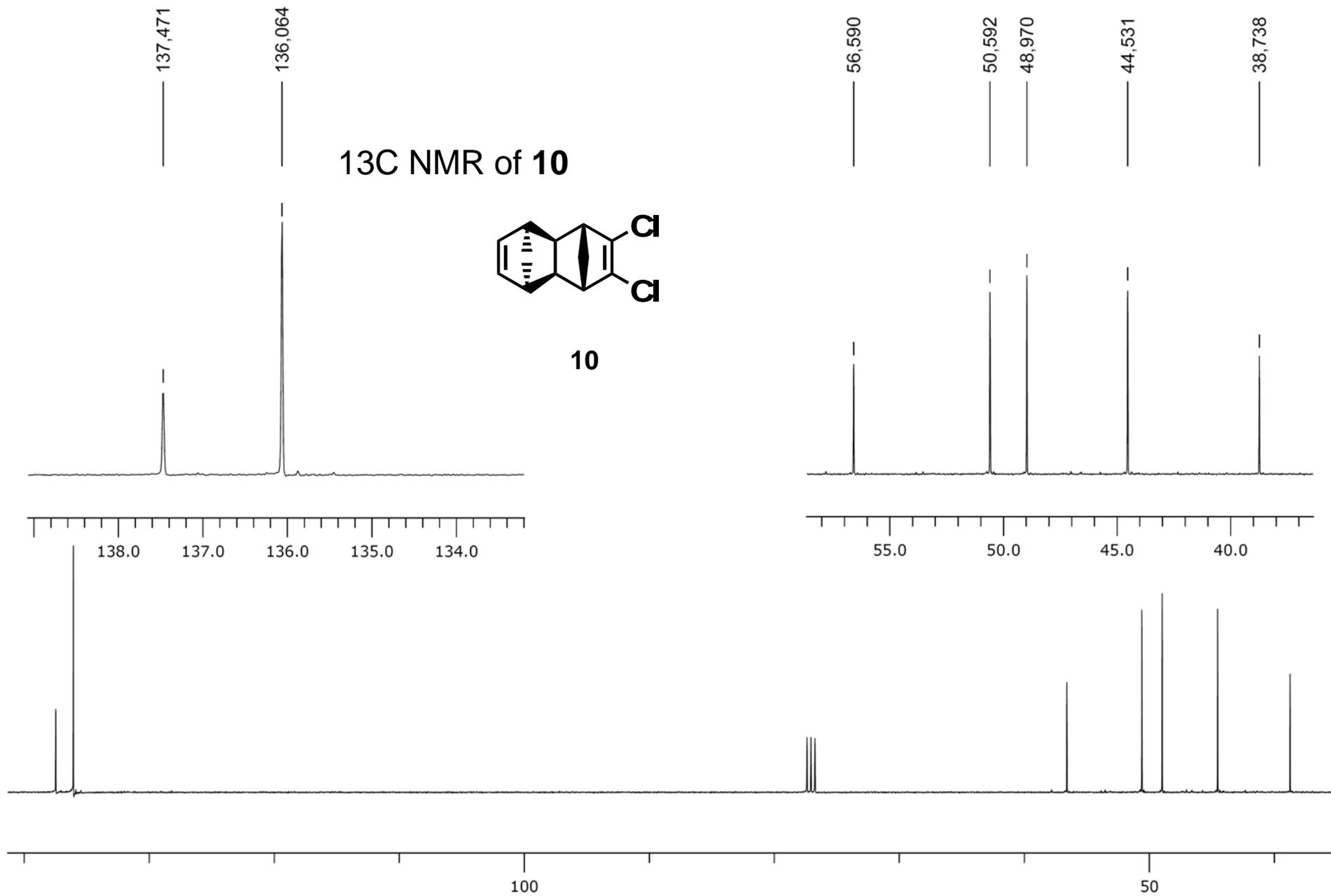
1,697
1,682
1,642
1,623
1,400
1,377



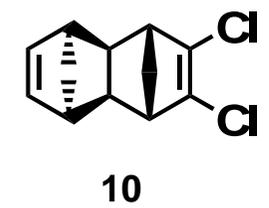
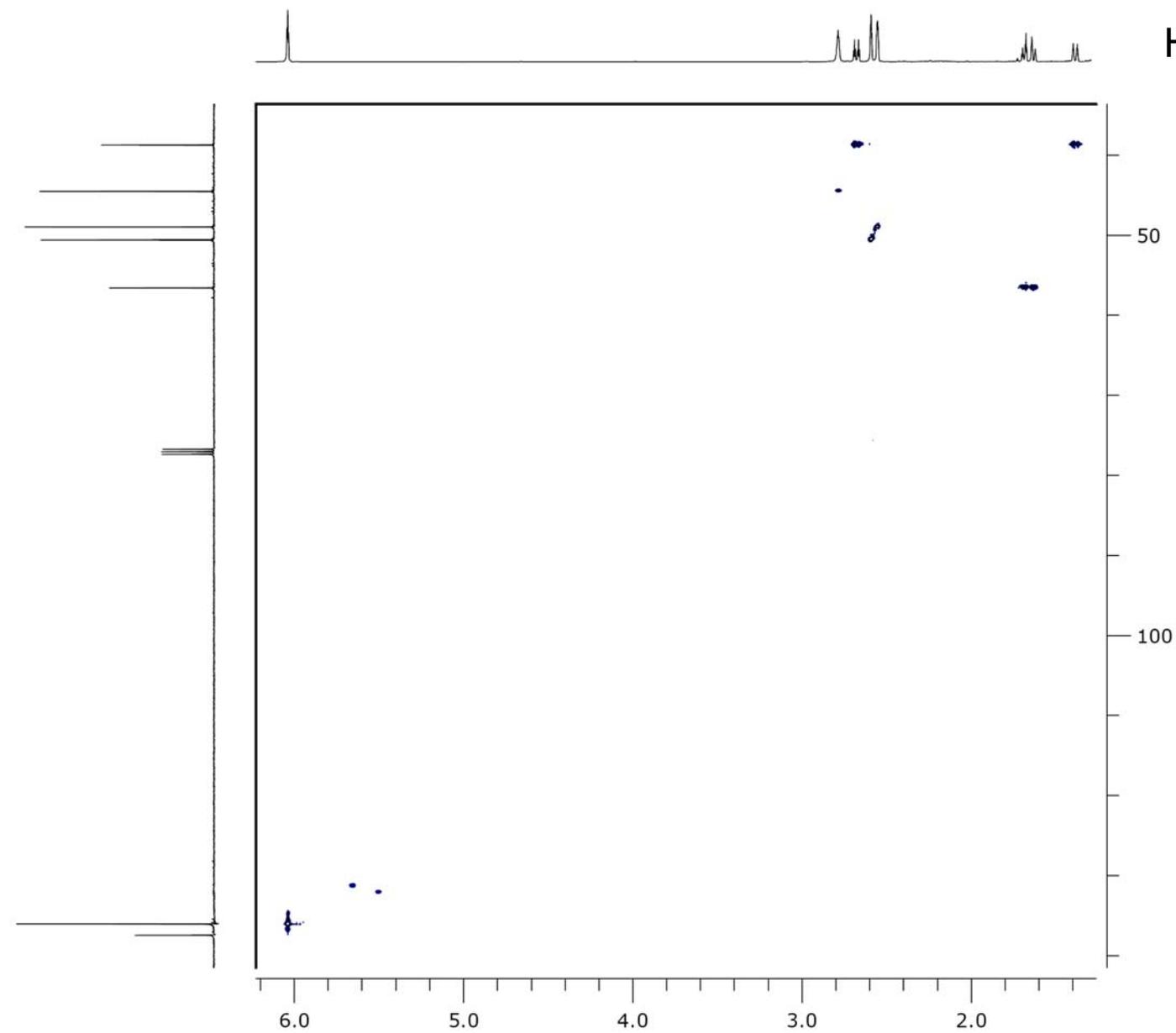
¹³C NMR of 10



10

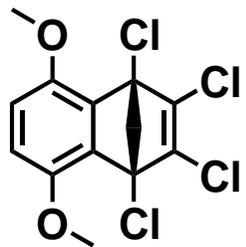


HMQC of 10

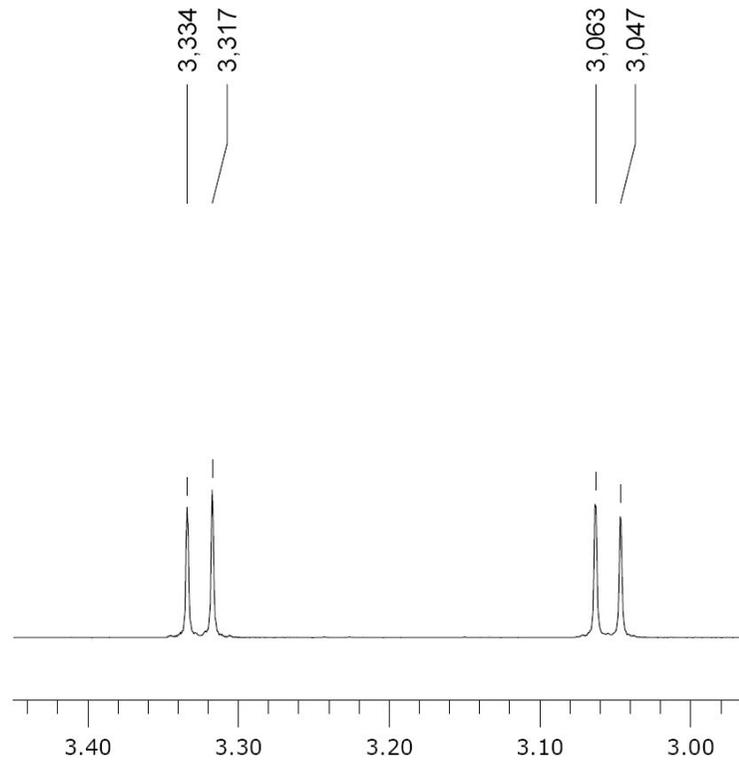


6.739

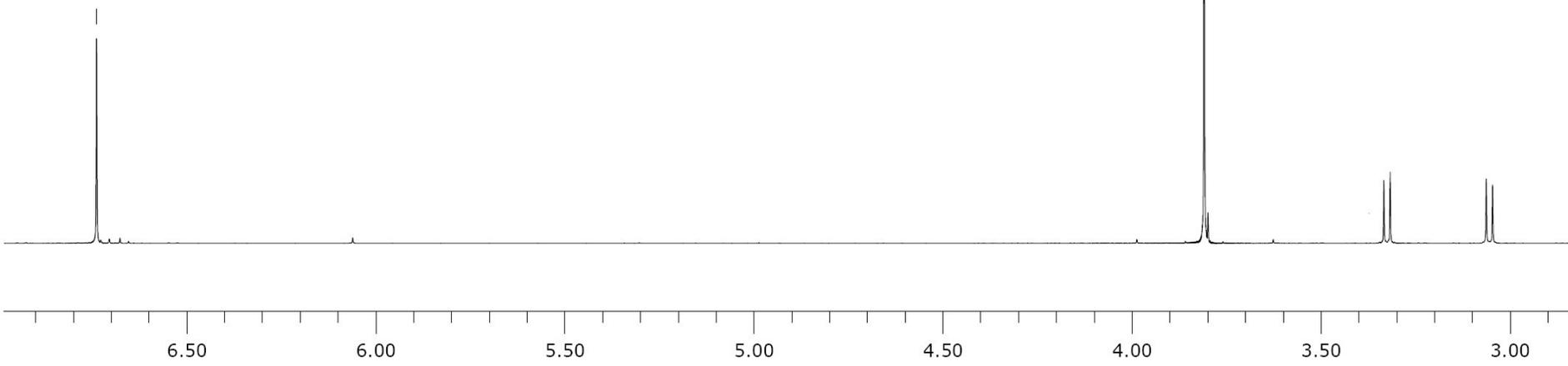
1H NMR of 11

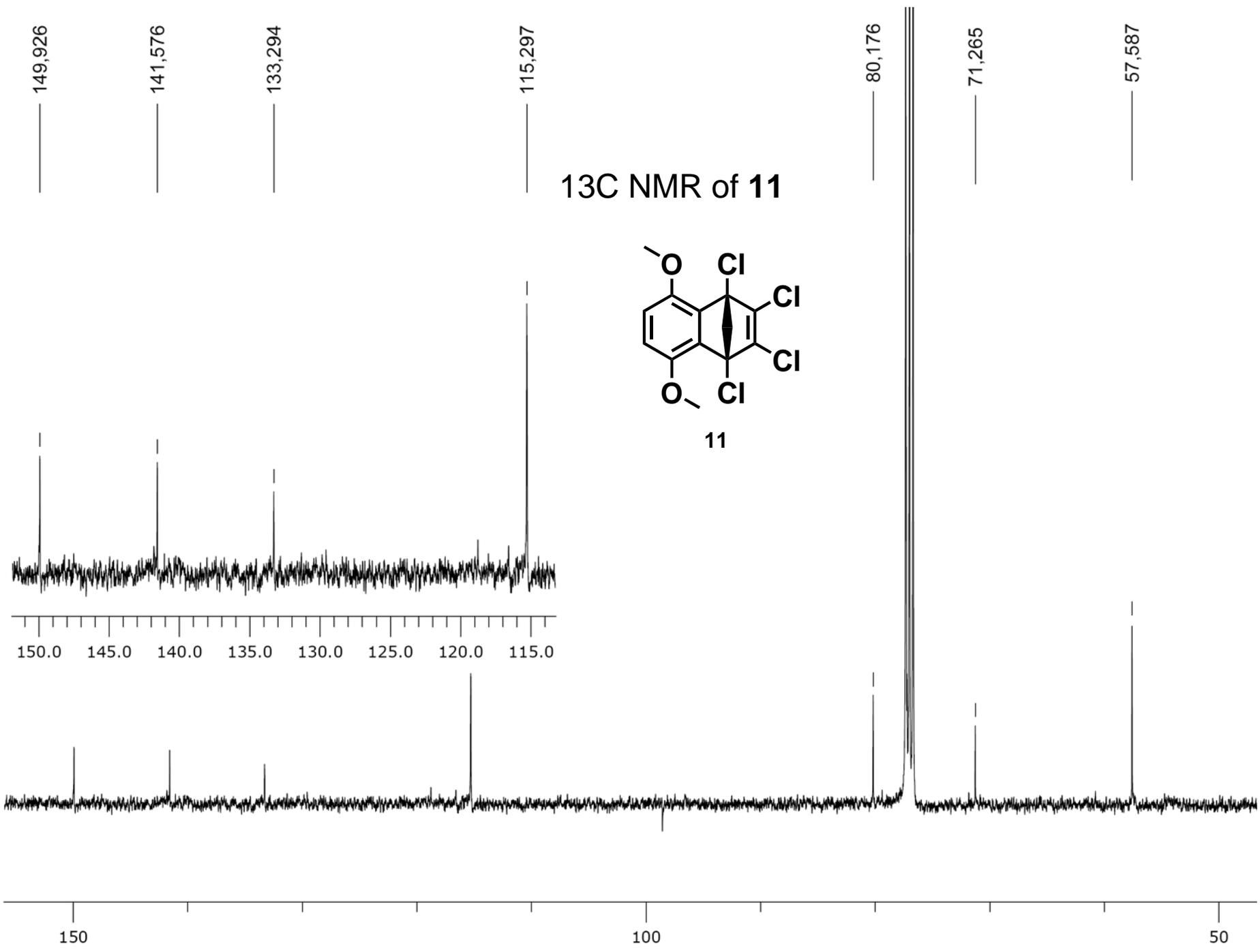


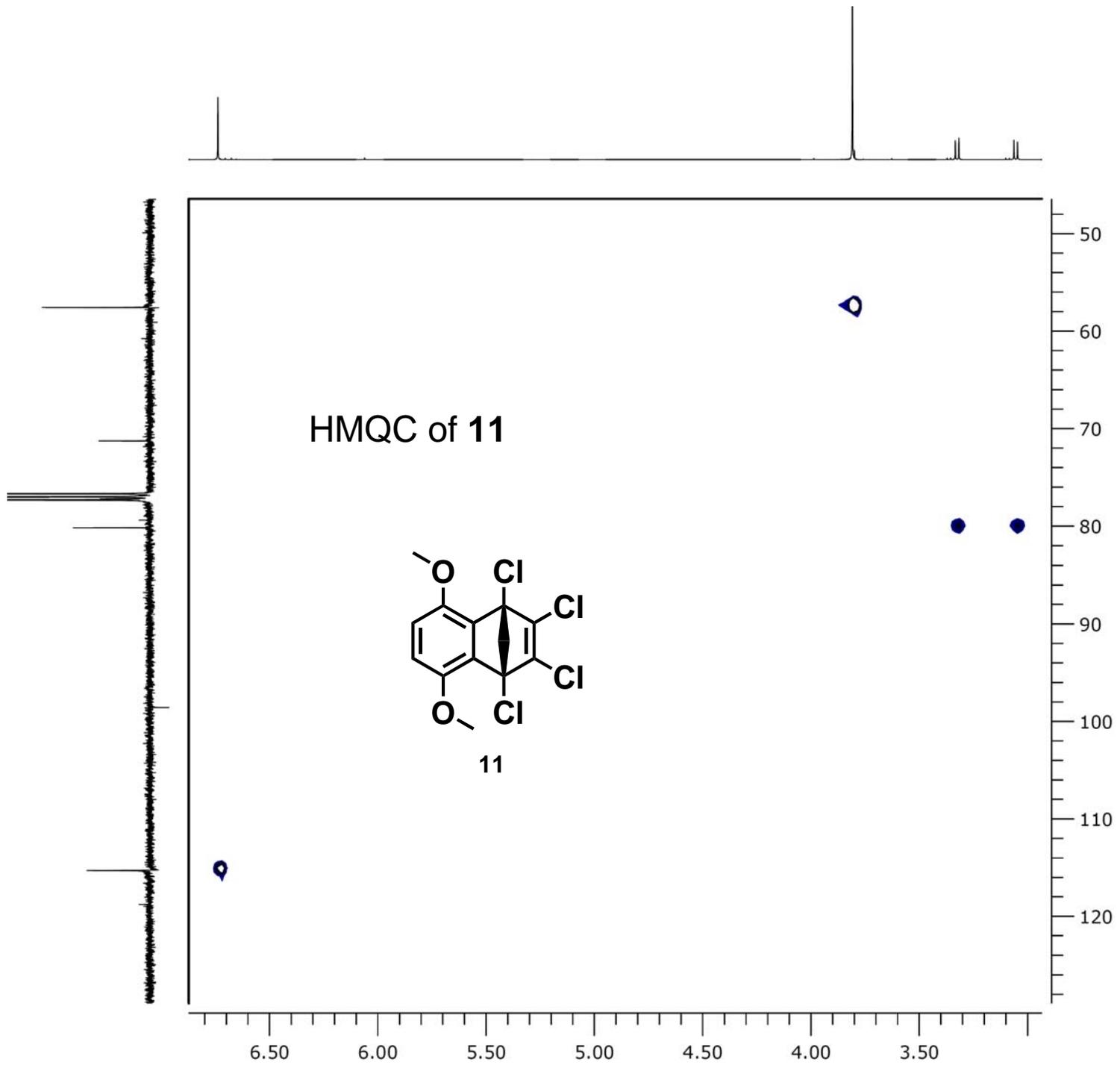
11

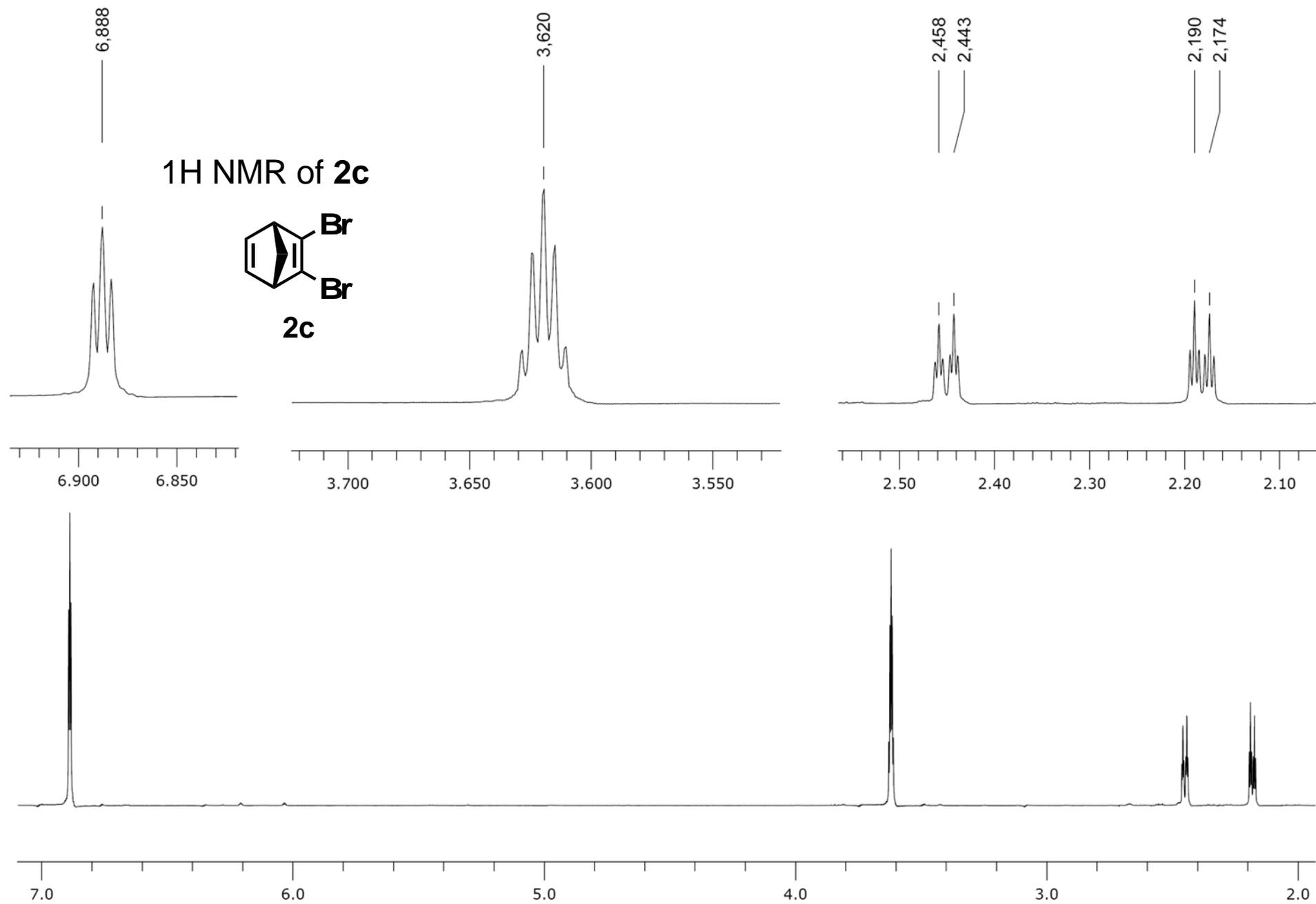


3.809









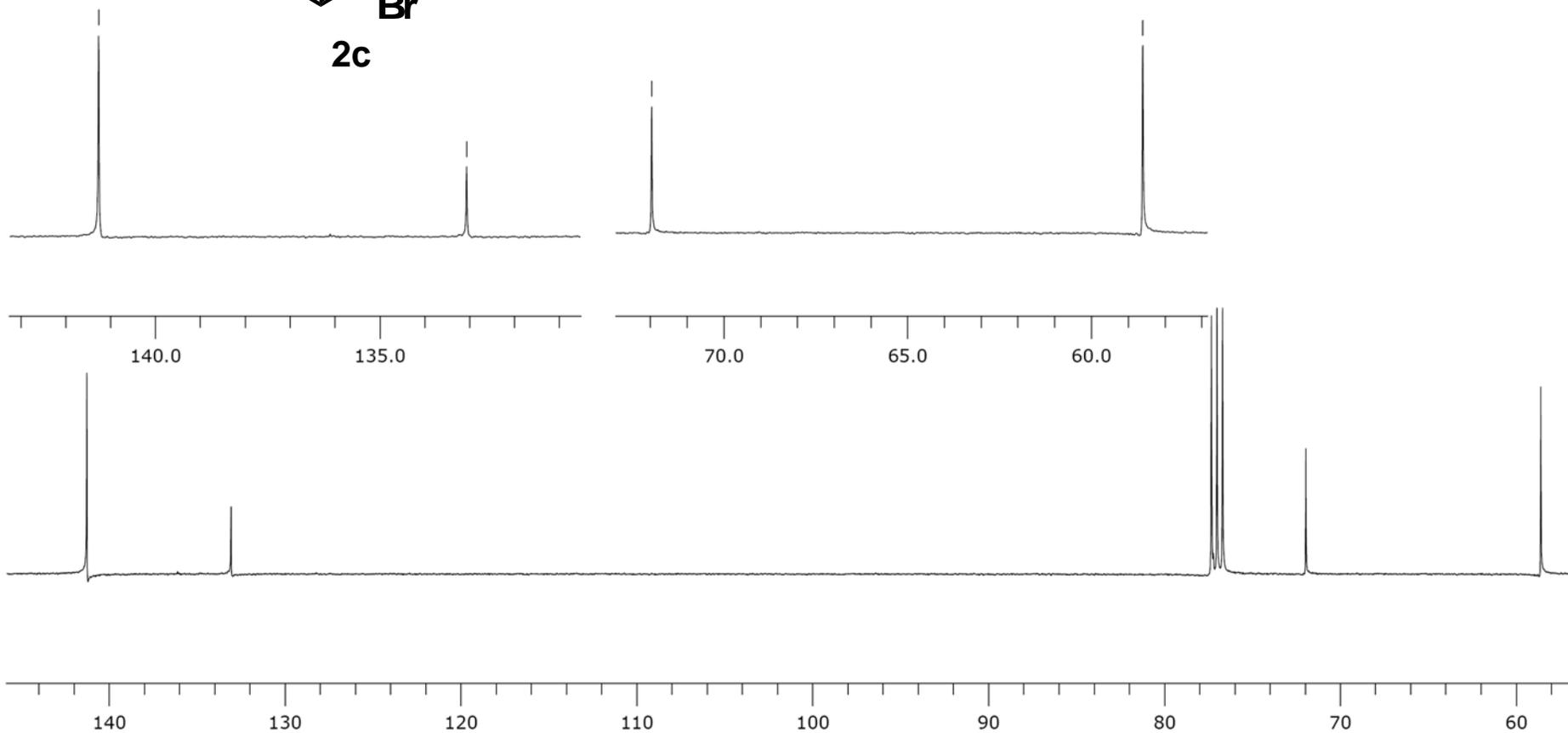
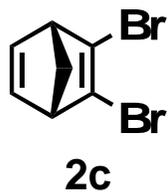
141,265

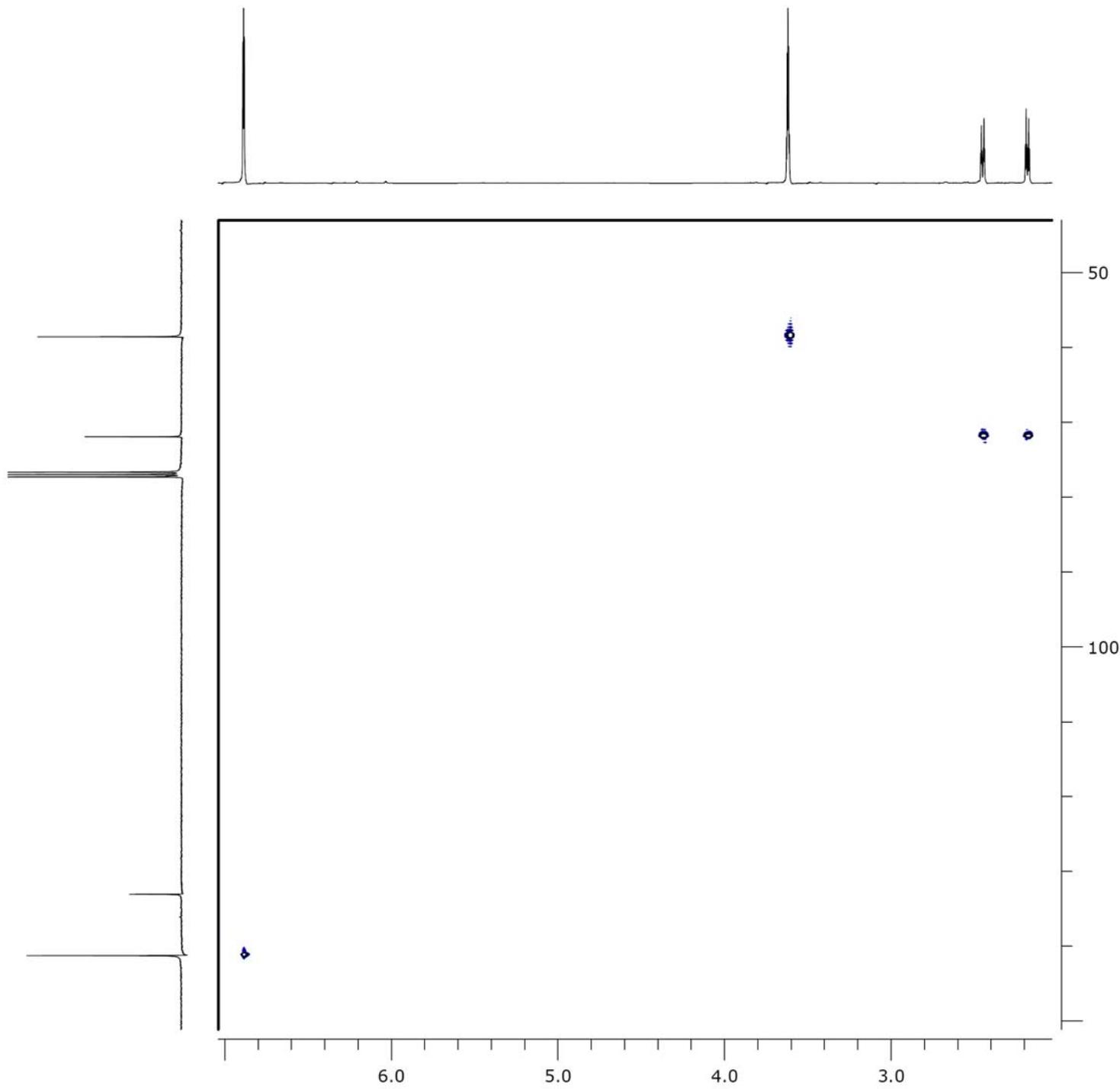
133,066

71,964

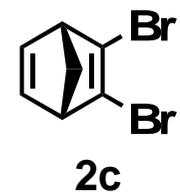
58,606

^{13}C NMR of **2c**

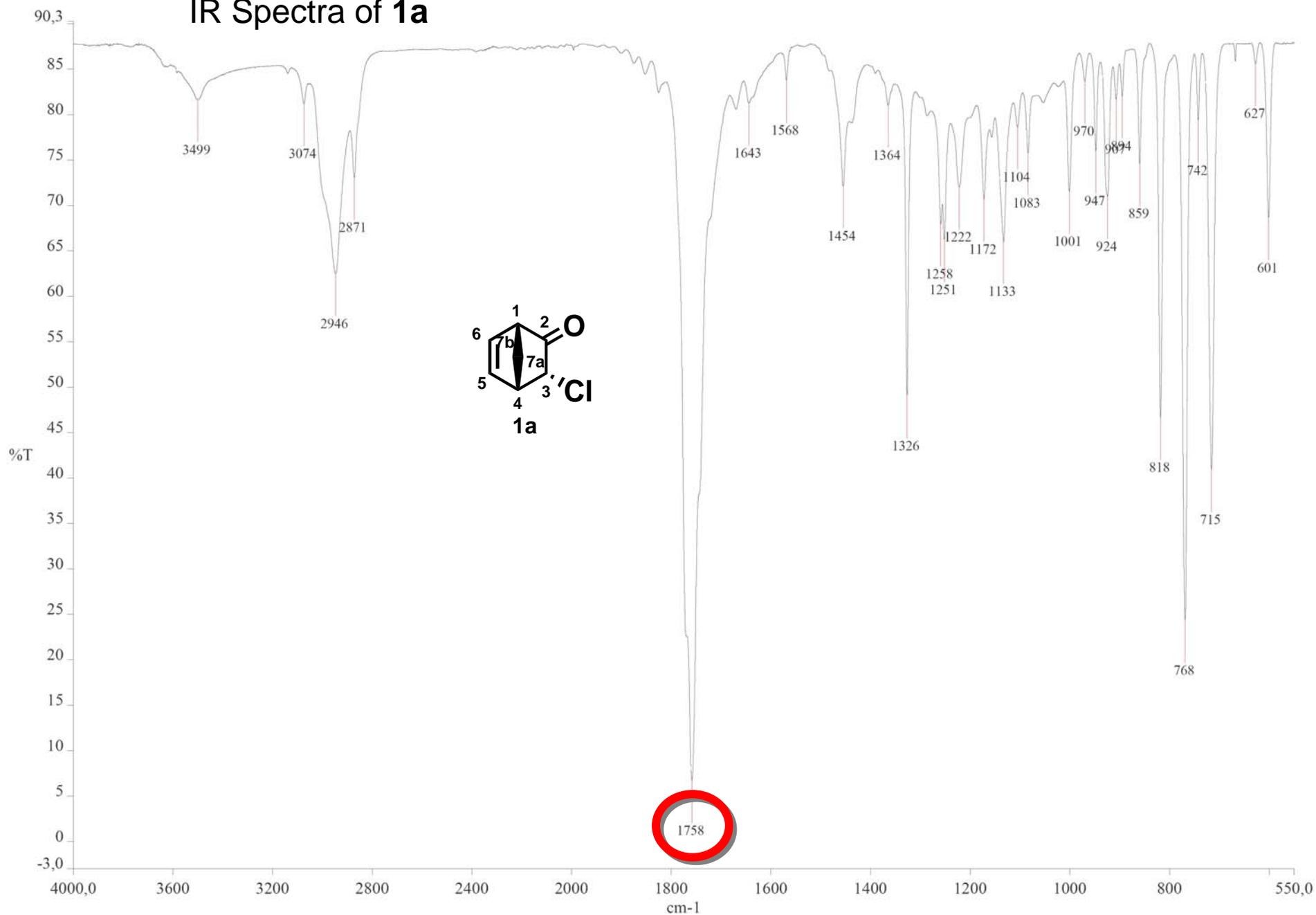




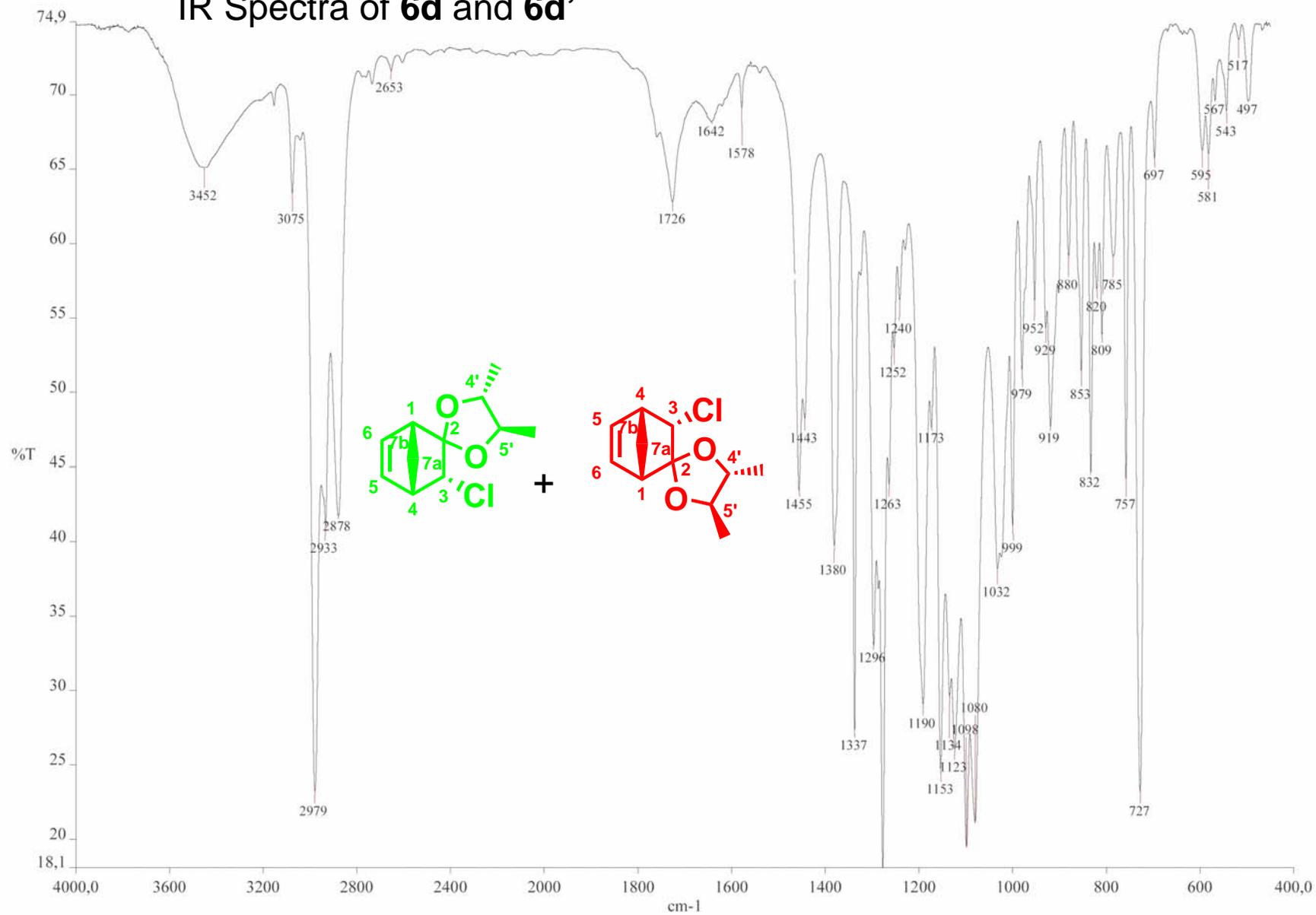
HMQC of **2c**



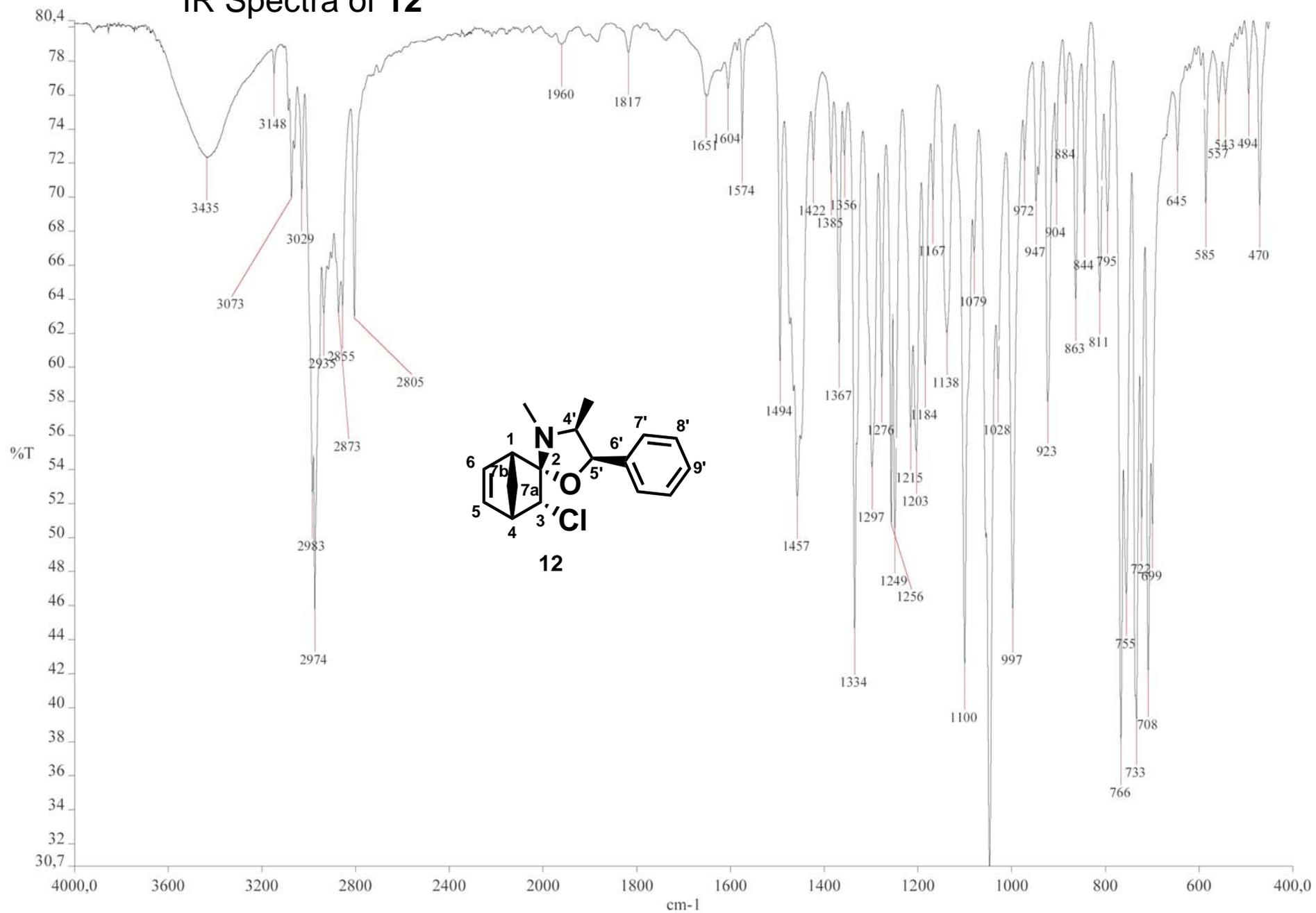
IR Spectra of 1a



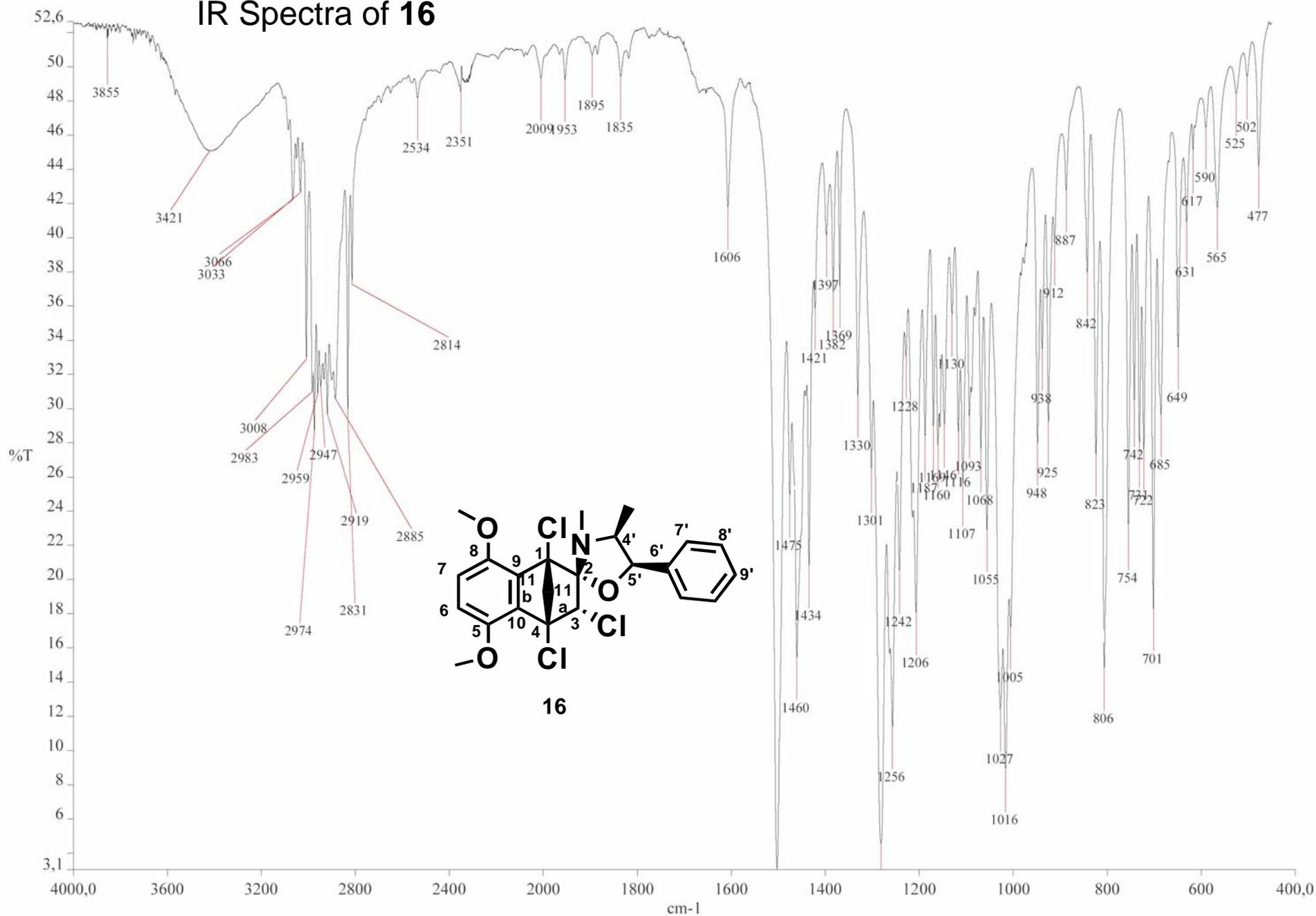
IR Spectra of 6d and 6d'



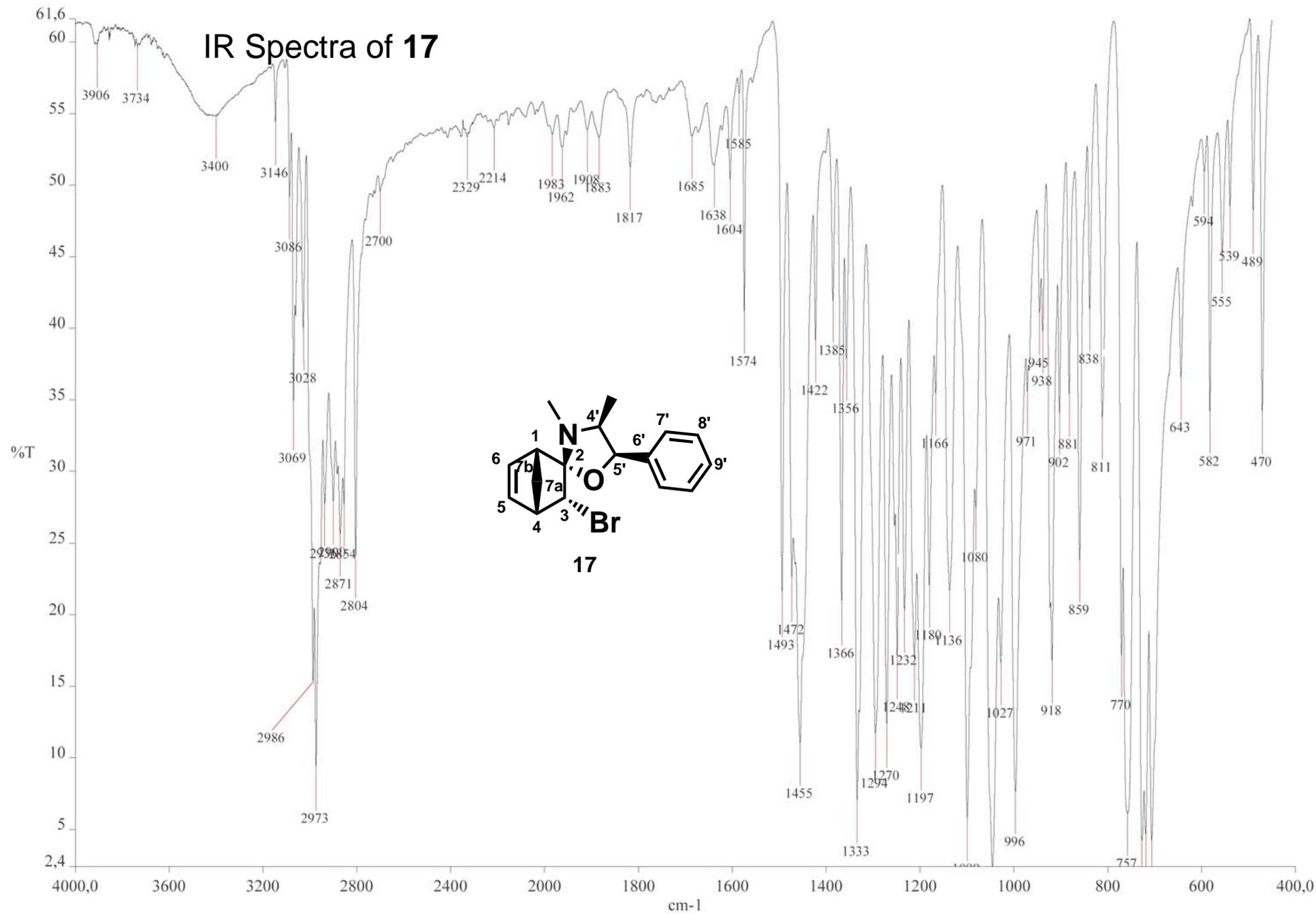
IR Spectra of 12



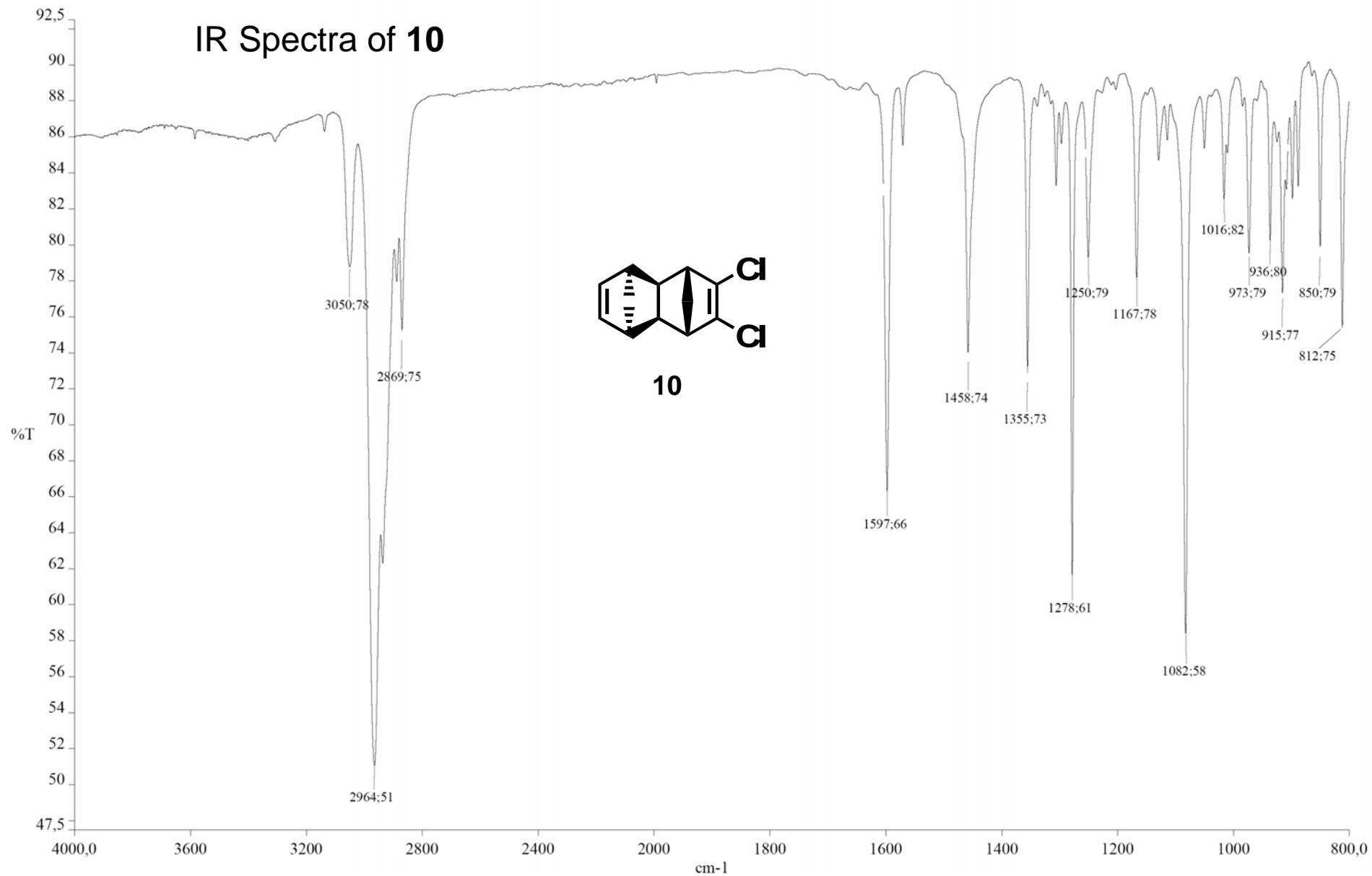
IR Spectra of 16



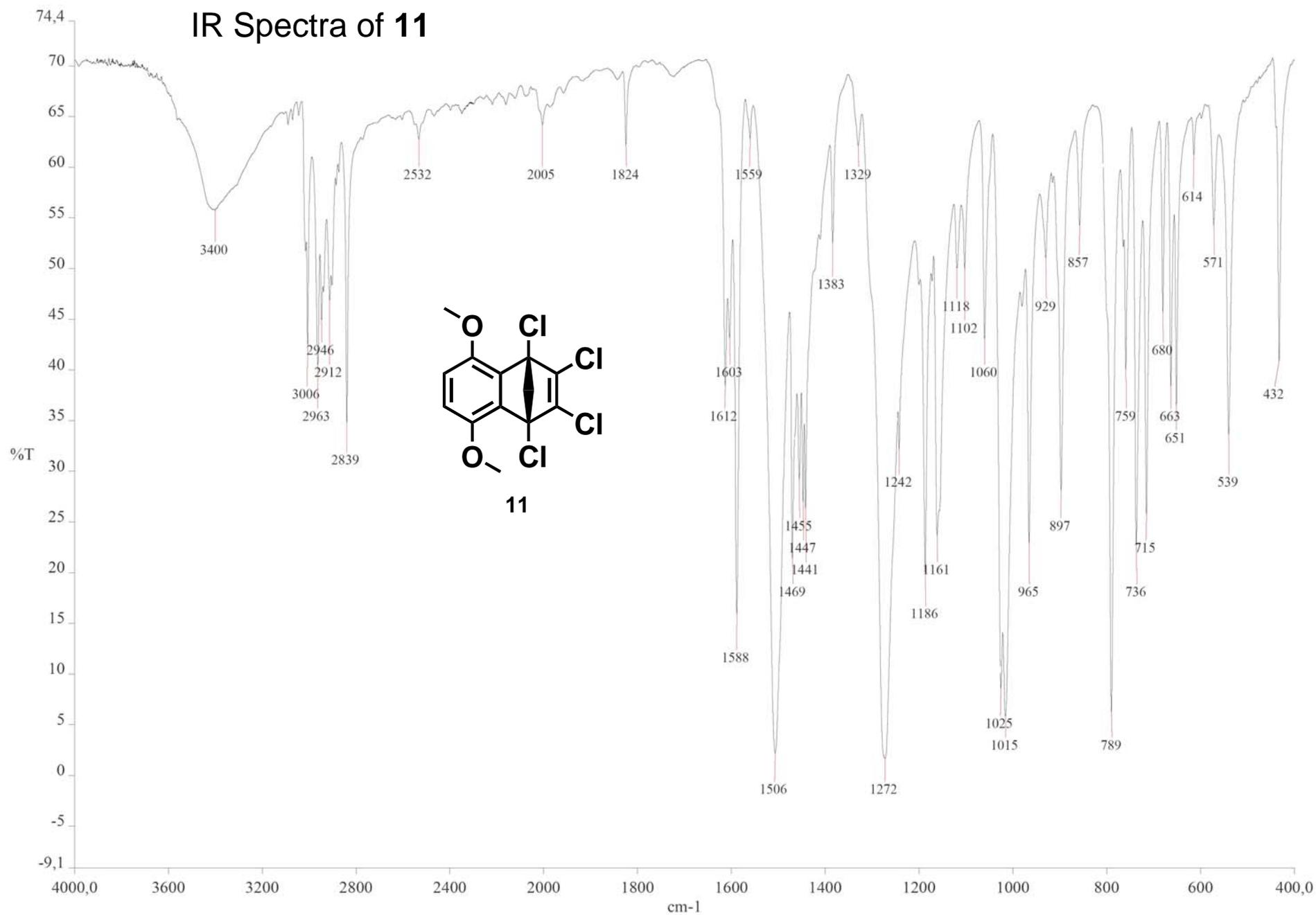
IR Spectra of 17



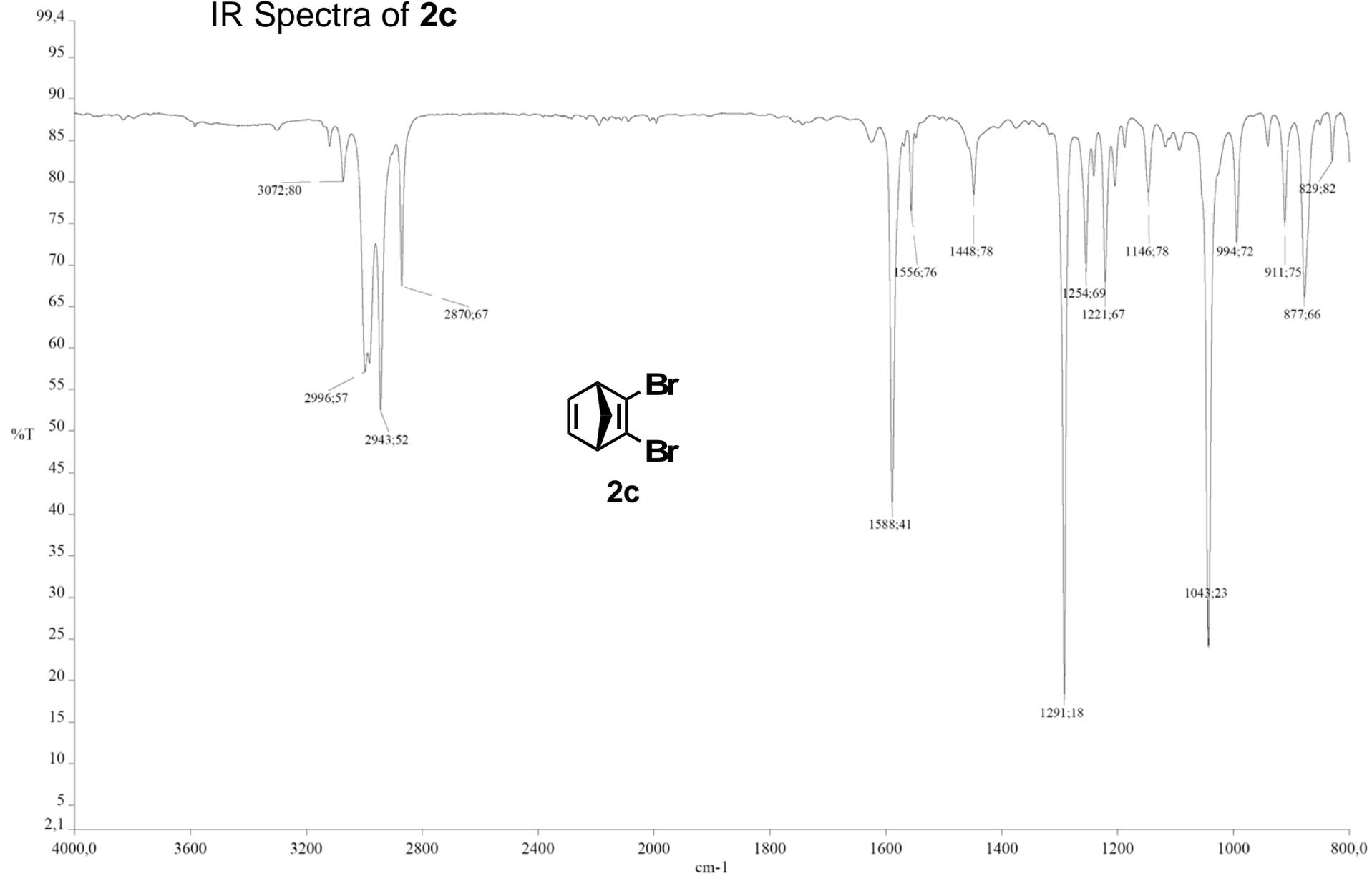
IR Spectra of 10



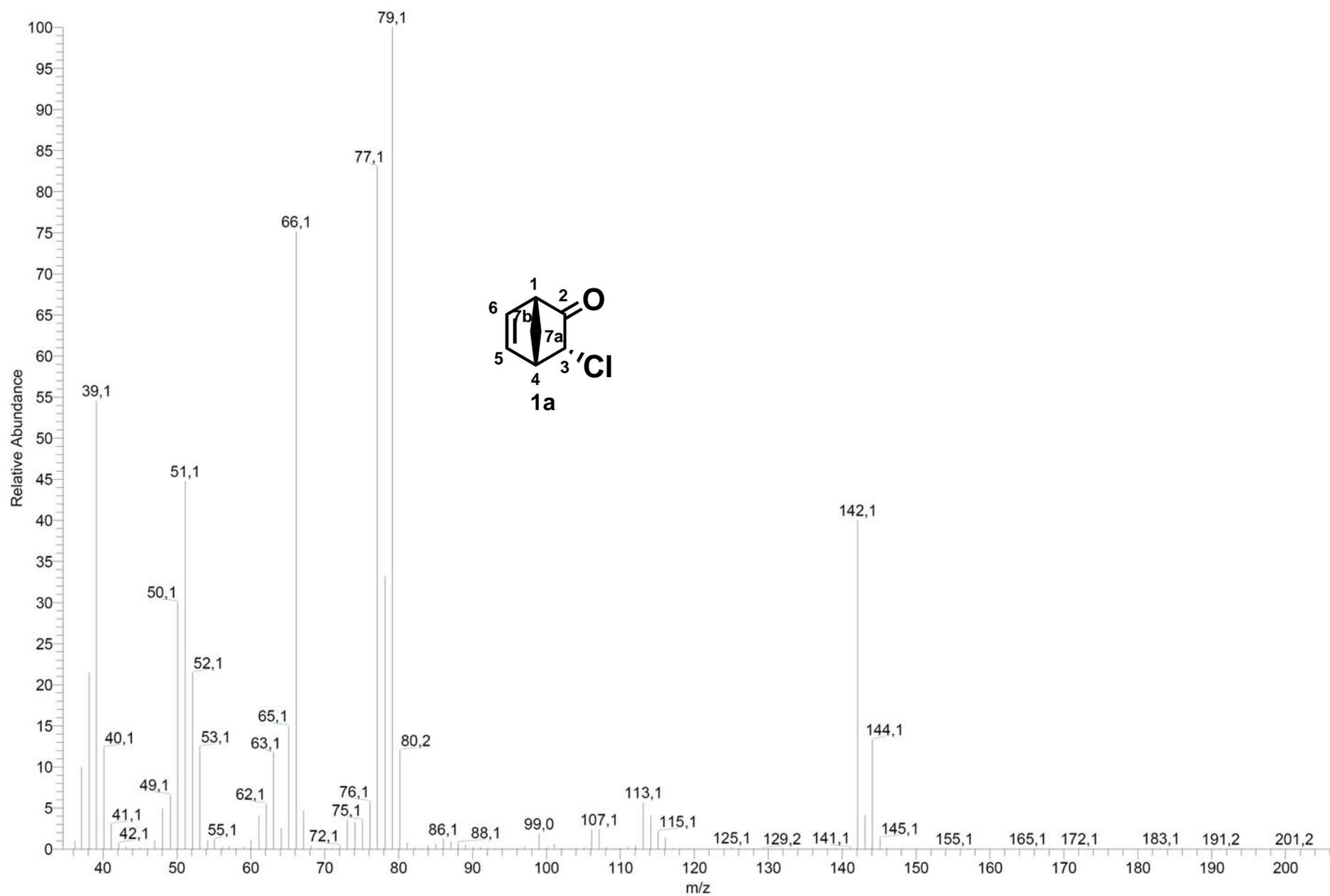
IR Spectra of 11



IR Spectra of **2c**



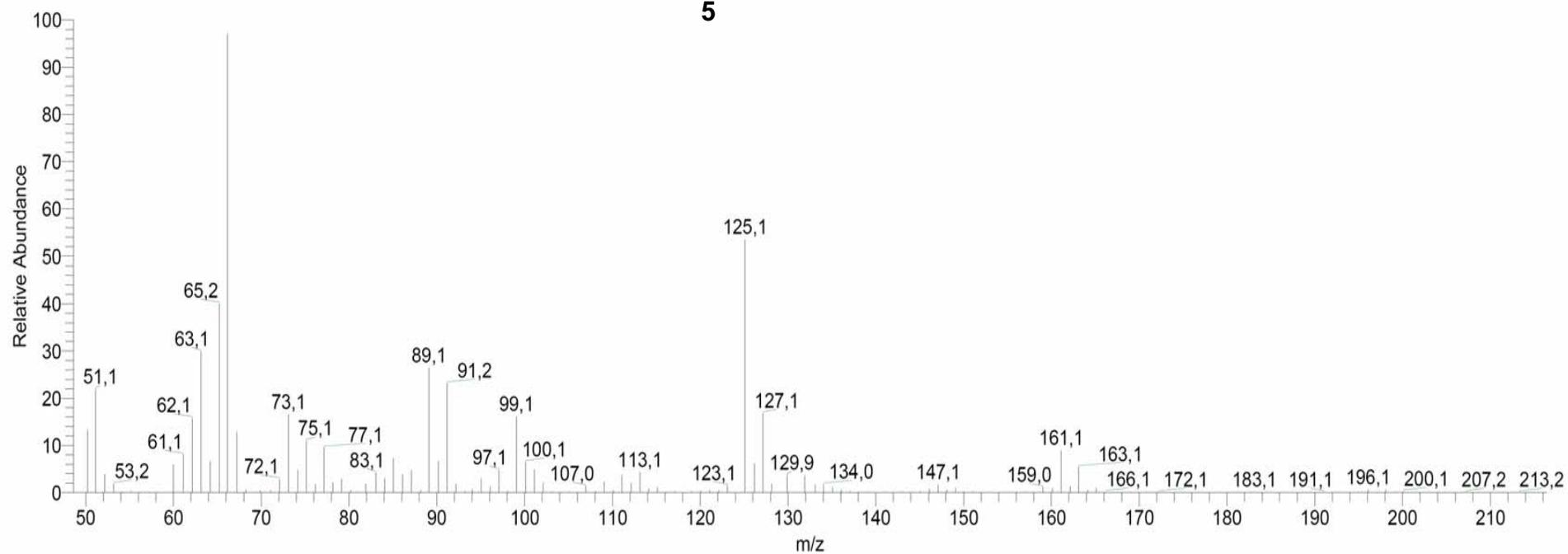
MS Spectra of 1a



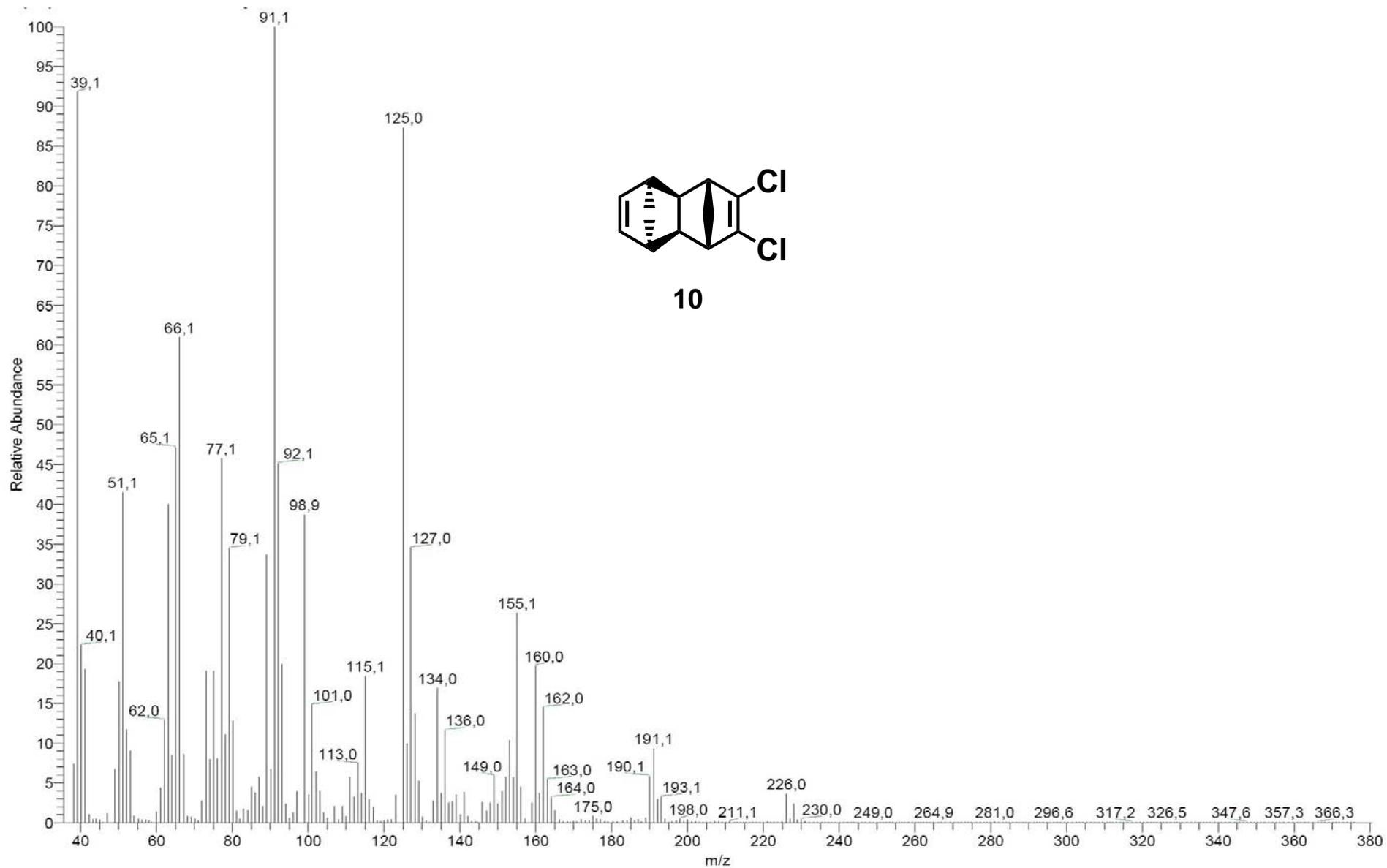
MS Spectra of 5



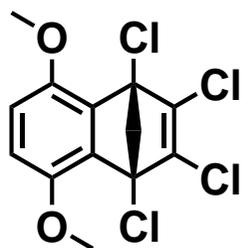
5



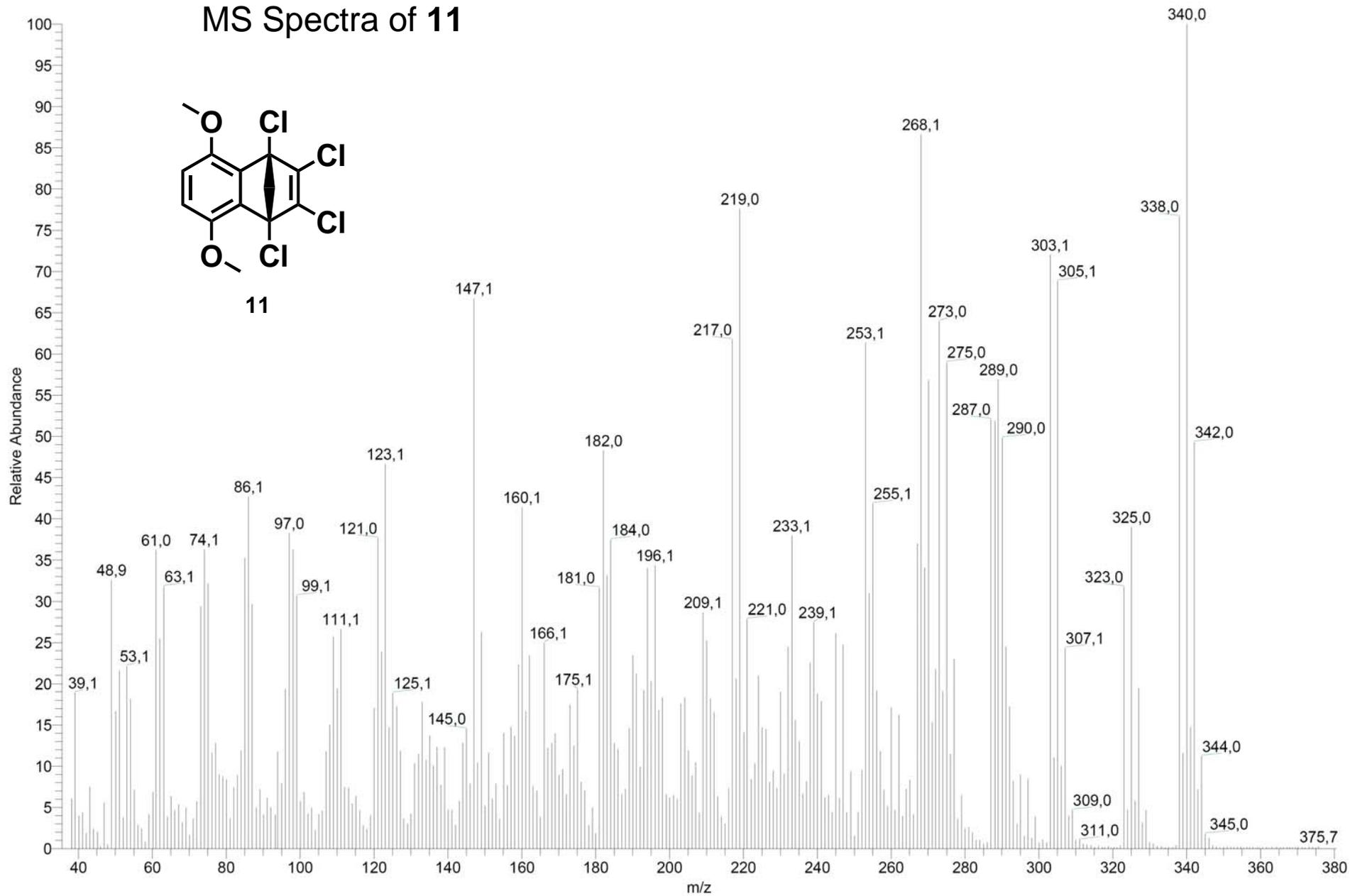
MS Spectra of 10



MS Spectra of 11



11



MS Spectra of **2c**

