

Electronic Supplementary Information

**Symmetrical and dissymmetrical 2,2'-bis-dipyrrin ligands and Zn(II)
binuclear helicates**

Fan Zhang, Stéphane A. Baudron* and Mir Wais Hosseini*

Laboratoire de Tectonique Moléculaire, UMR UdS-CNRS 7140, icFRC

Institut Le Bel, Université de Strasbourg

4 rue Blaise Pascal, CS 90032, F-67081 Strasbourg cedex, France

Fax: (+) 33 3 68 85 13 25

E-mail: hosseini@unistra.fr ; sbaudron@unistra.fr

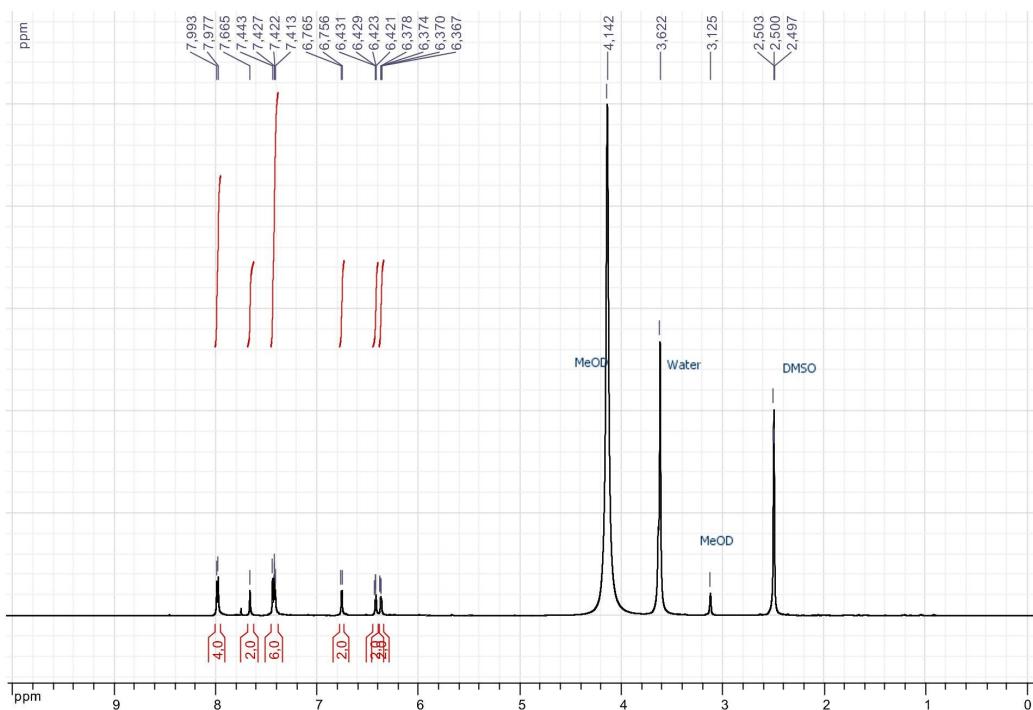


Fig. ESI1 ^1H -NMR spectrum of compound **1** in $\text{DMSO-d}_6/20\%$ MeOD-d_4 .

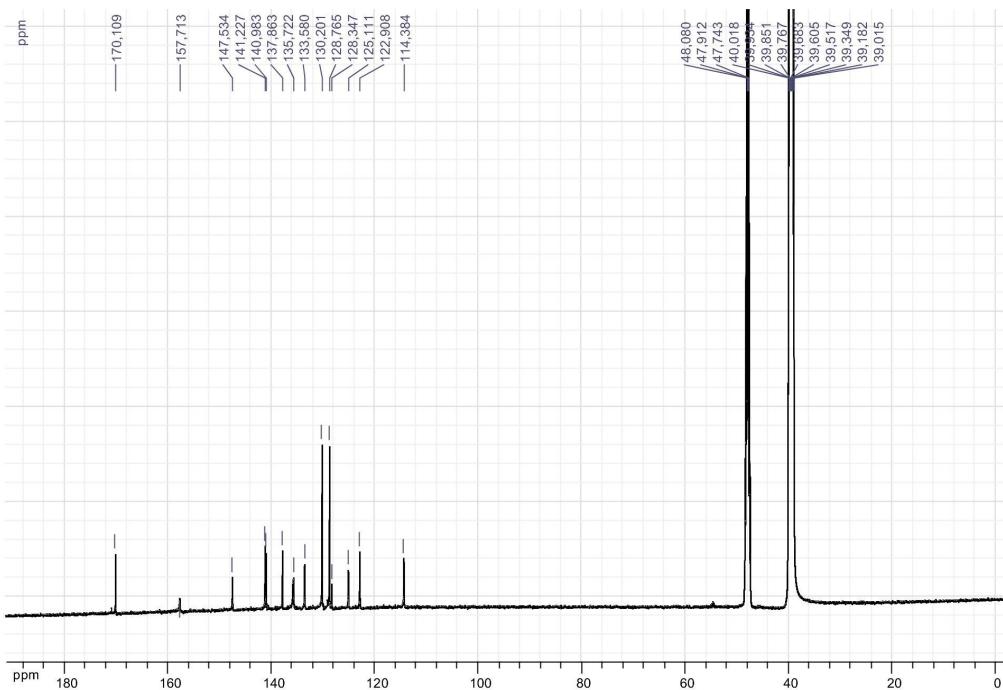


Fig. ESI2 ^{13}C -NMR spectrum of compound **1** in $\text{DMSO-d}_6/20\%$ MeOD-d_4 .

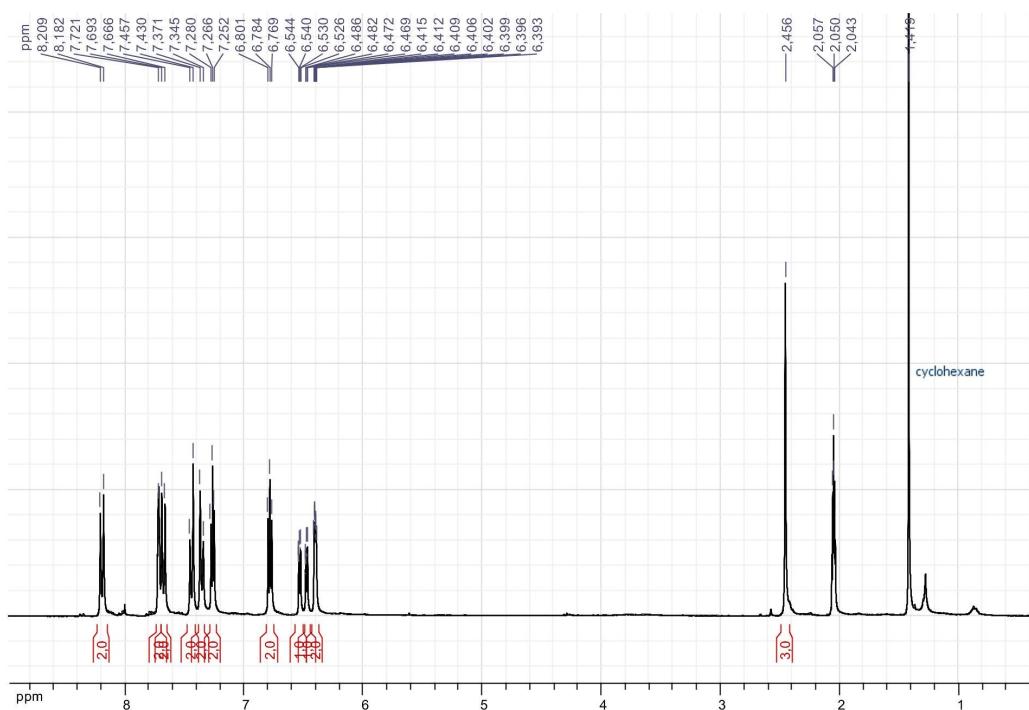


Fig. ESI3 ^1H -NMR spectrum of compound **2** in Acetone- d_6

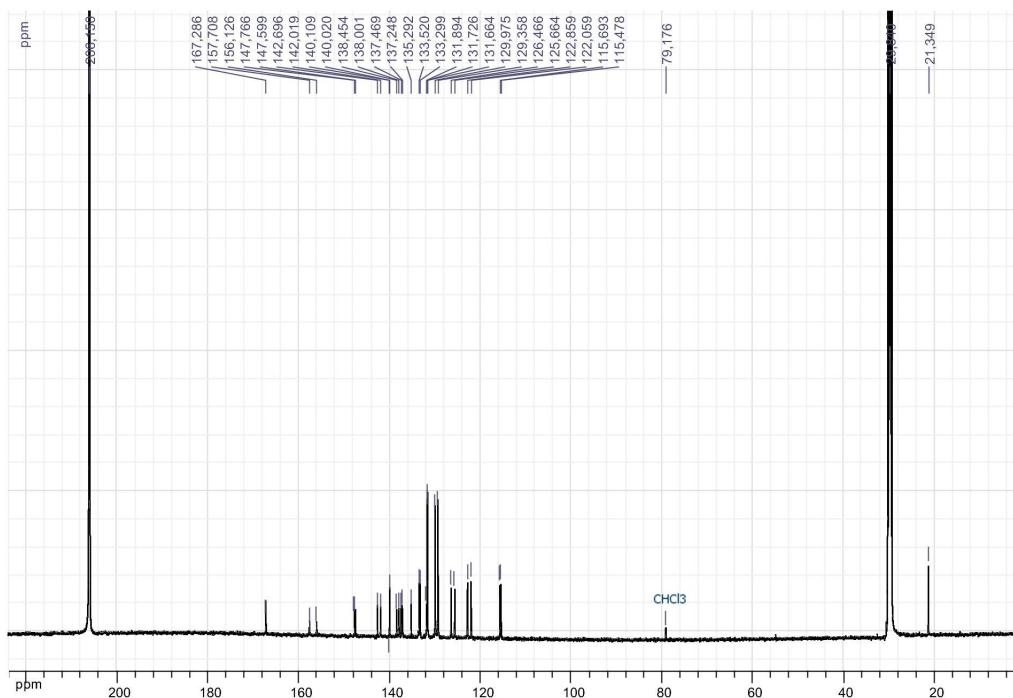


Fig. ESI4 ^{13}C -NMR spectrum of compound **2** in Acetone- d_6 .

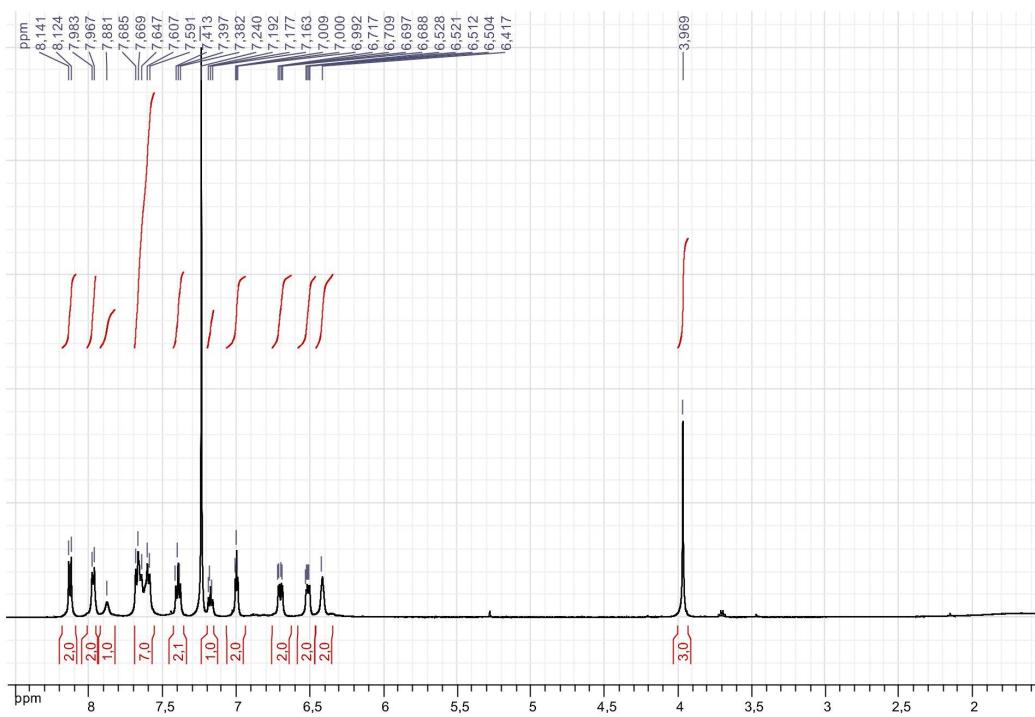


Fig. ESI5 ^1H -NMR spectrum of compound **4** in CDCl_3 .

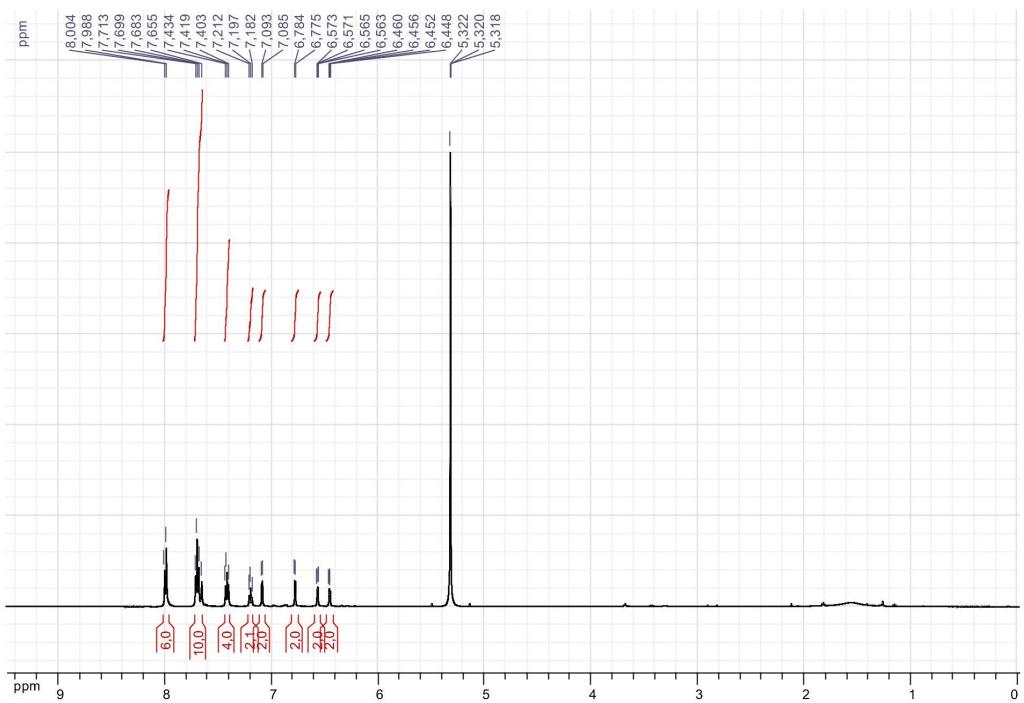


Fig. ESI6 ^1H -NMR spectrum of compound **5** in CD_2Cl_2 .

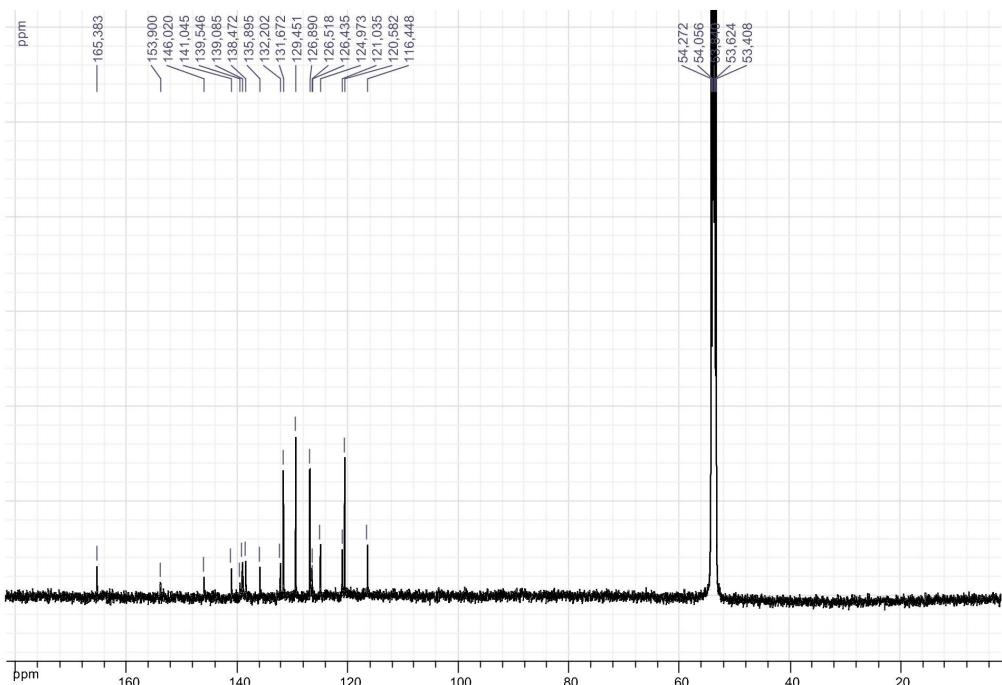


Fig. ESI 7. ^{13}C -NMR spectrum of compound **5** in CD_2Cl_2 .

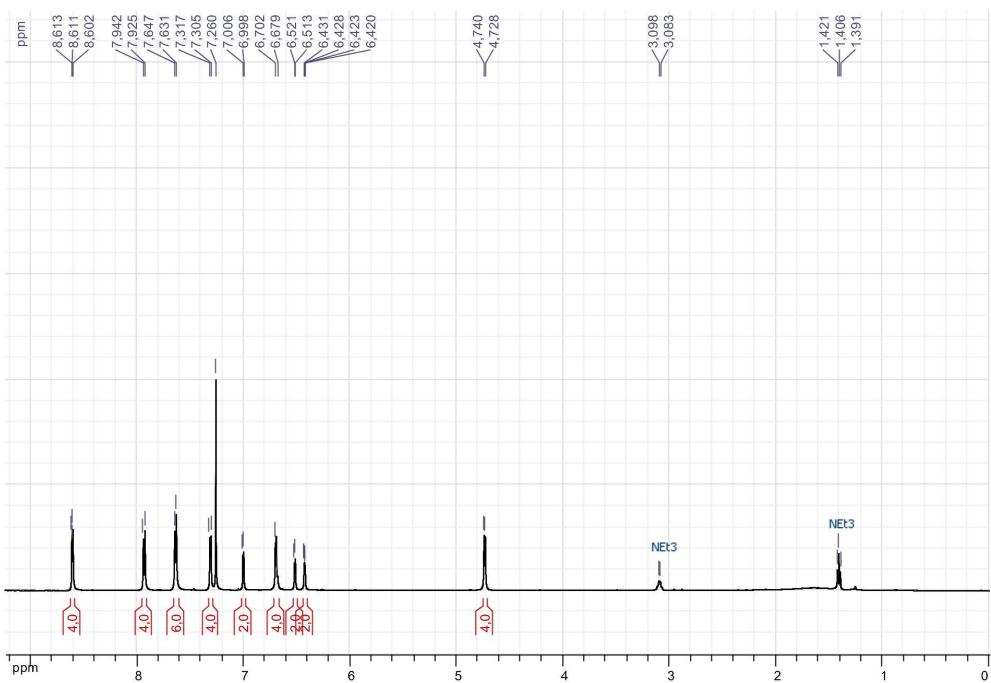


Fig. ESI 8. ^1H -NMR spectrum of compound **6** in CDCl_3 .

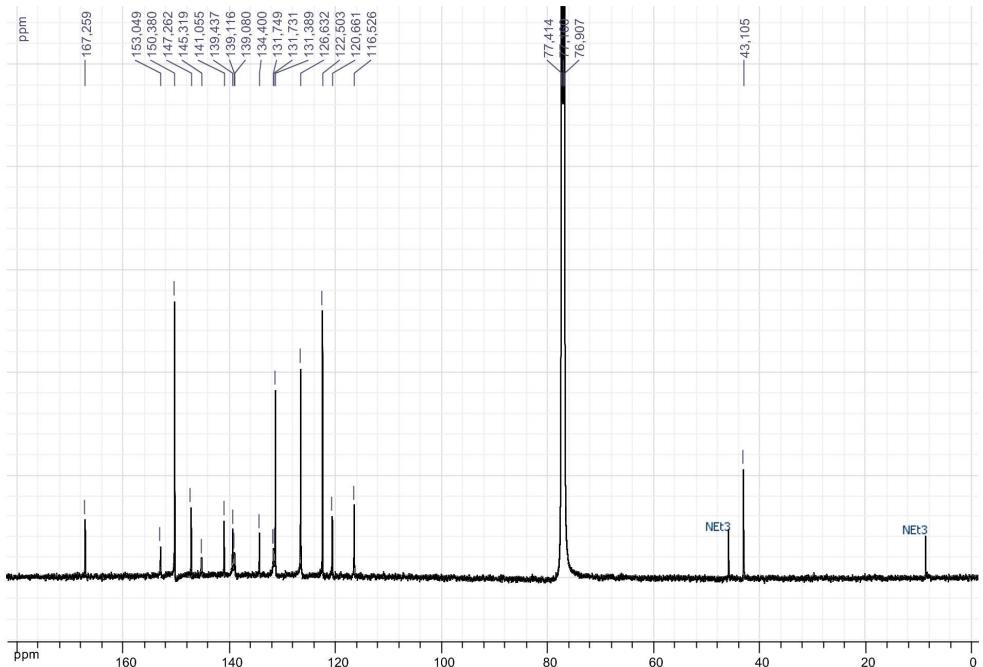


Fig. ESI9 ^{13}C -NMR spectrum of compound **6** in CDCl_3 .

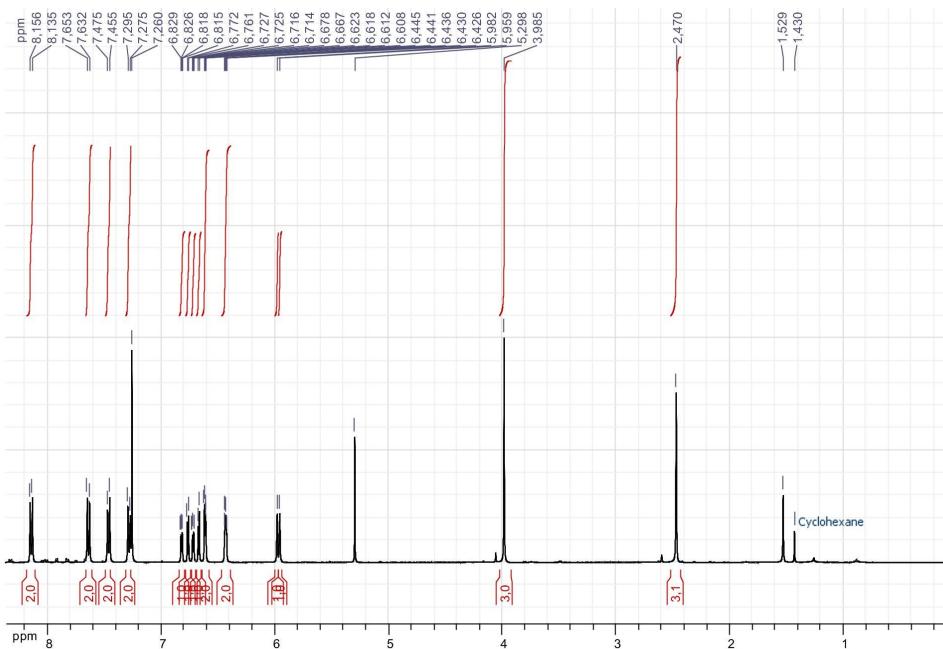


Fig. ESI 10. ^1H -NMR spectrum of complex **9** in CDCl_3 .

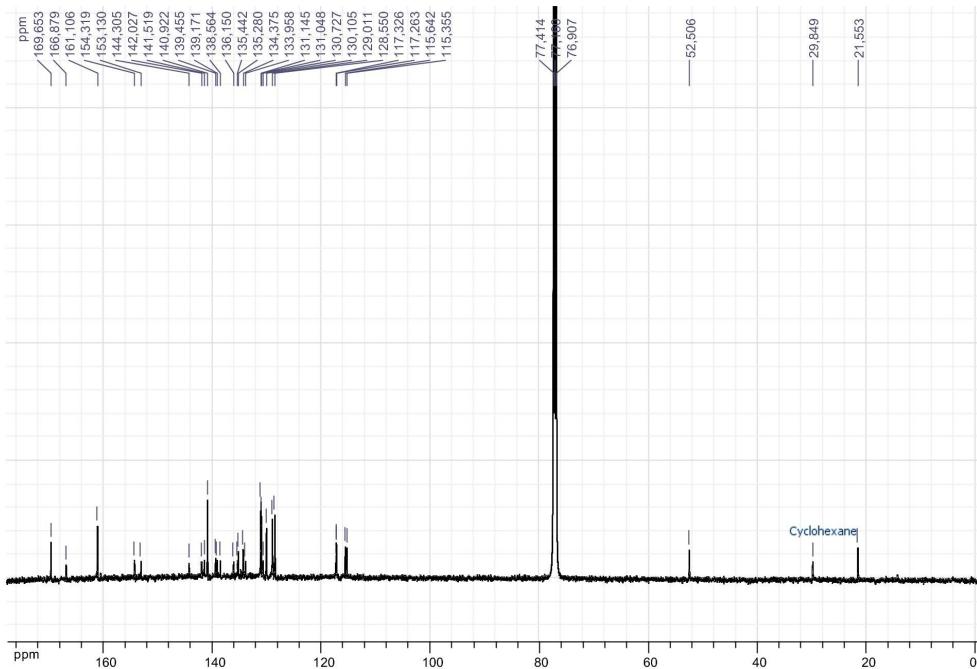


Fig. ESI11 ^{13}C -NMR spectrum of complex **9** in CDCl_3 .

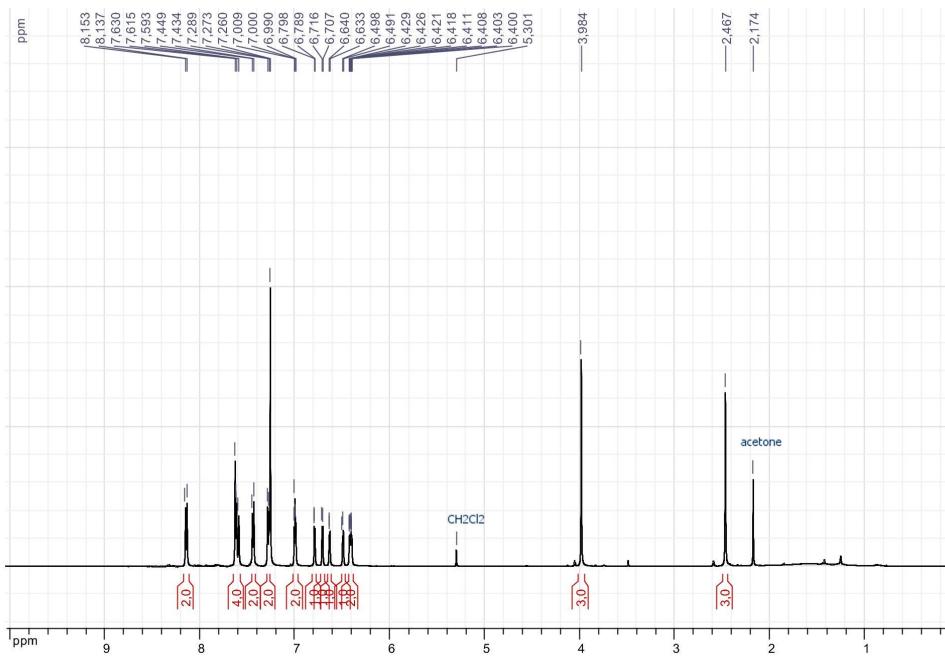


Fig. ESI 12. ^1H -NMR spectrum of compound **10** in CDCl_3 .

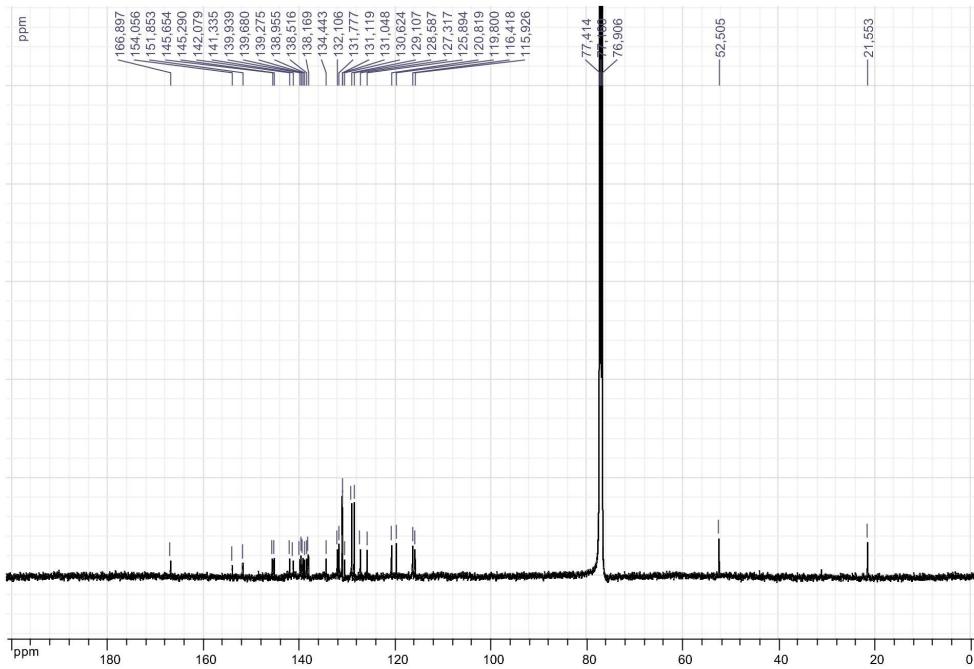


Fig. ESI 13. ^{13}C -NMR spectrum of compound **10** in CDCl_3 .

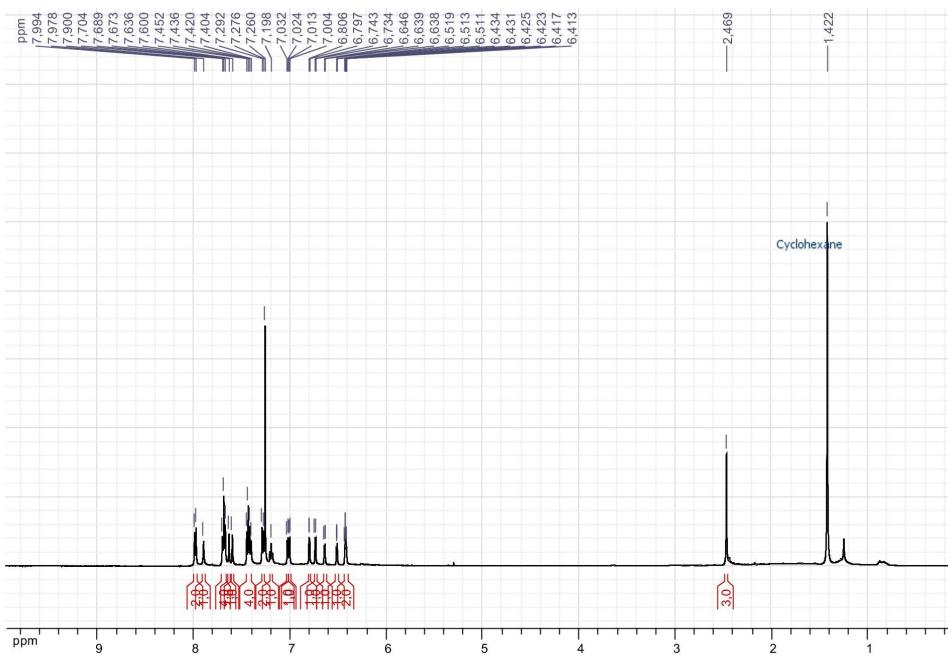


Fig. ESI 14. ^1H -NMR spectrum of compound **11** in CDCl_3 .

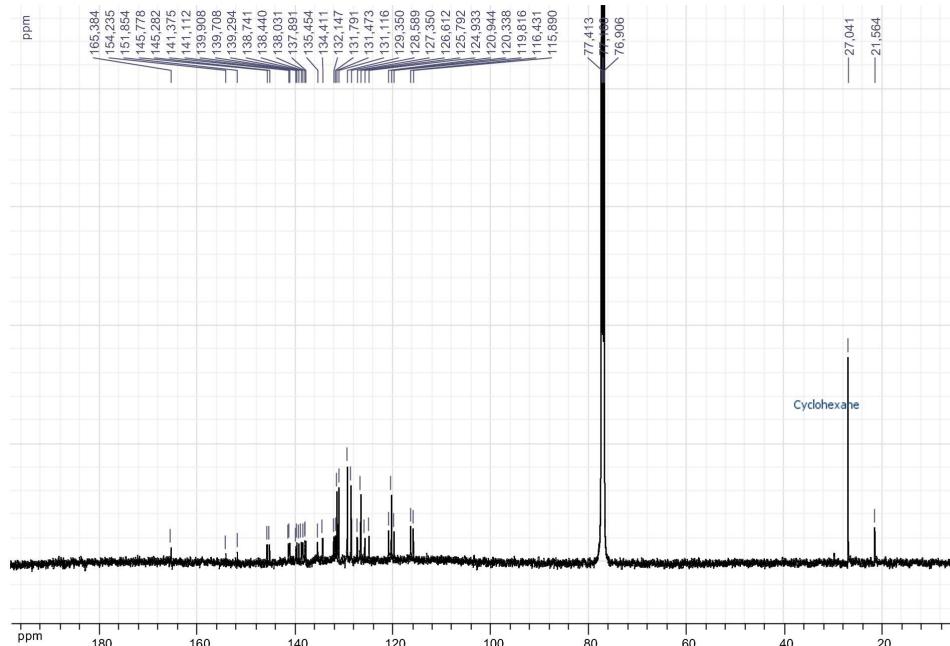


Fig. ESI 15 ^{13}C -NMR spectrum of compound **11** in CDCl_3 .

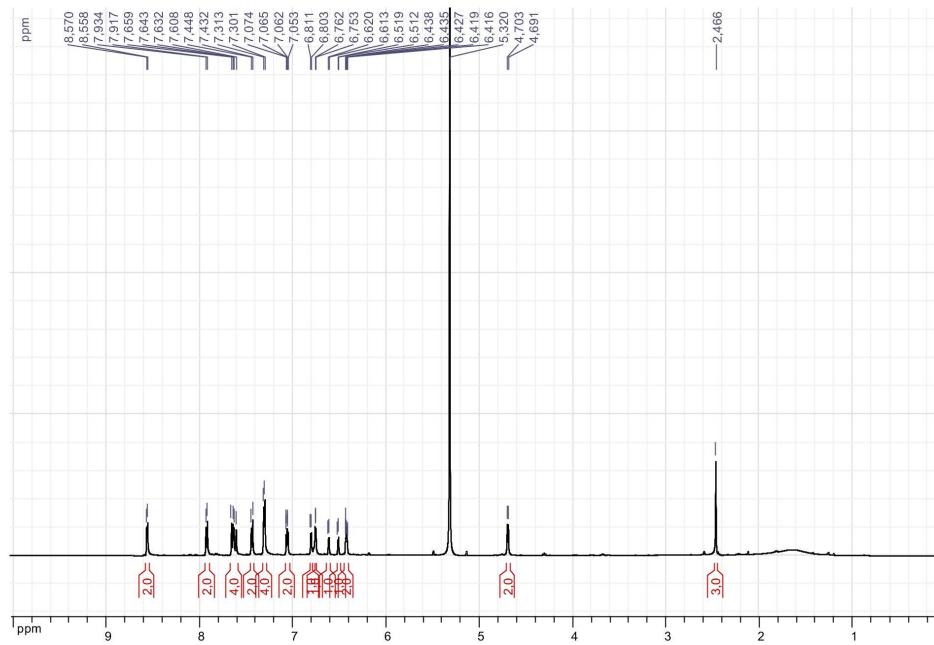


Fig. ESI 16. ^1H -NMR spectrum of compound **12** in CD_2Cl_2 .

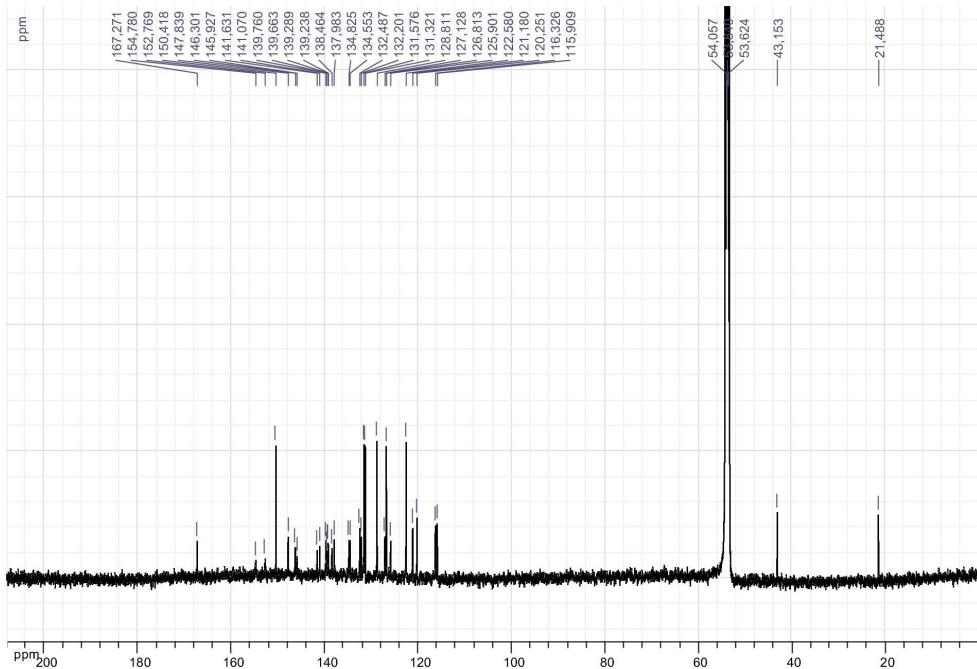


Fig. ESI17 ^{13}C -NMR spectrum of compound **12** in CD_2Cl_2 .

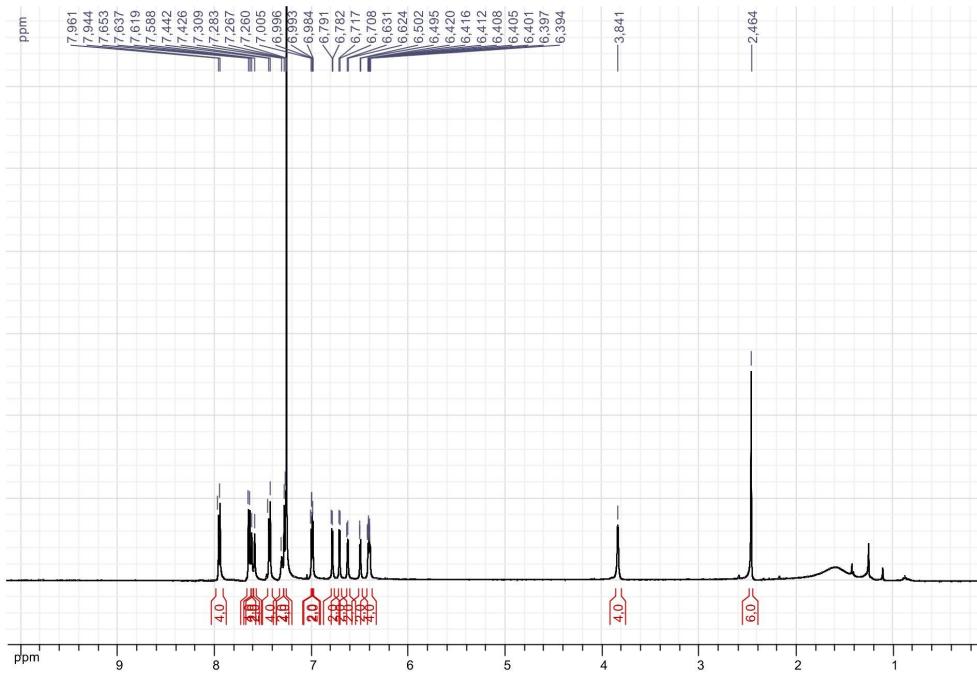


Fig. ESI 18. ^1H -NMR spectrum of compound **13** in CDCl_3 .

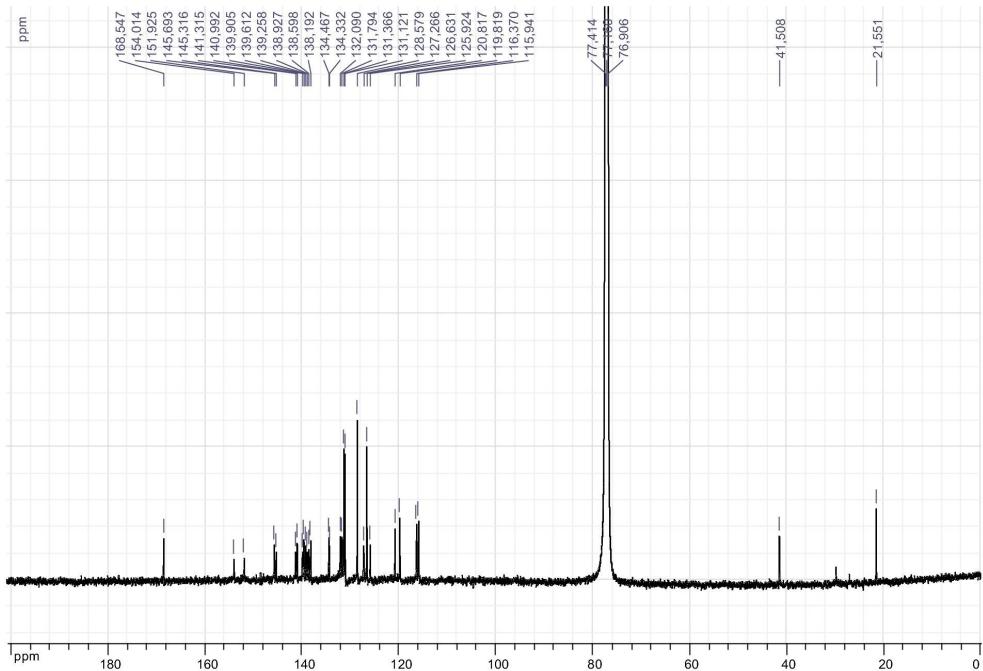


Fig. ESI19 ^{13}C -NMR spectrum of compound **13** in CDCl_3 .

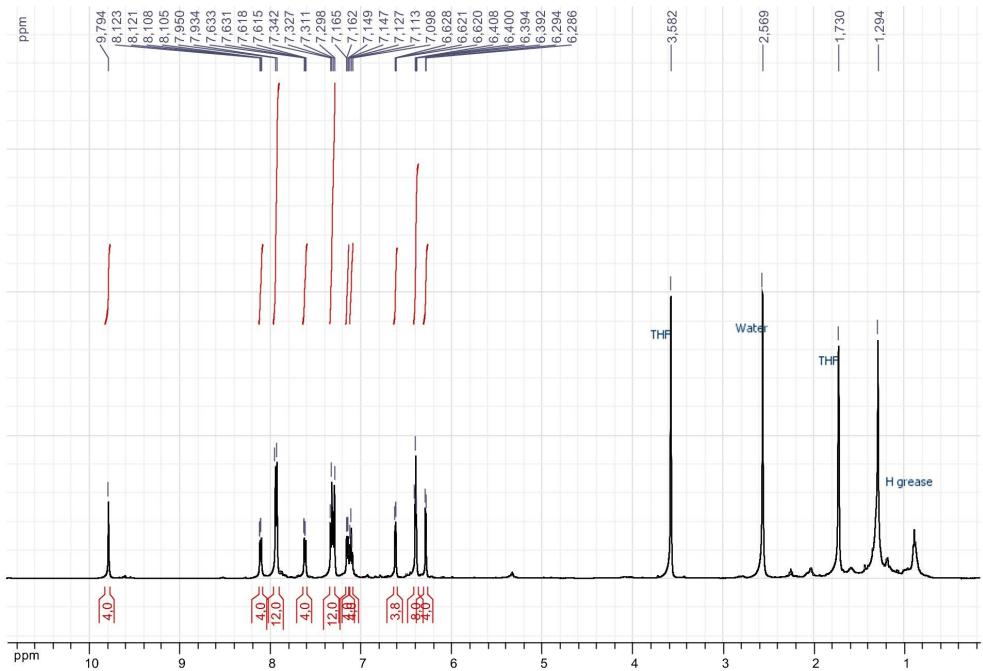


Fig. ESI 20. ^1H -NMR spectrum of helicate **14** in THF-d_8 .

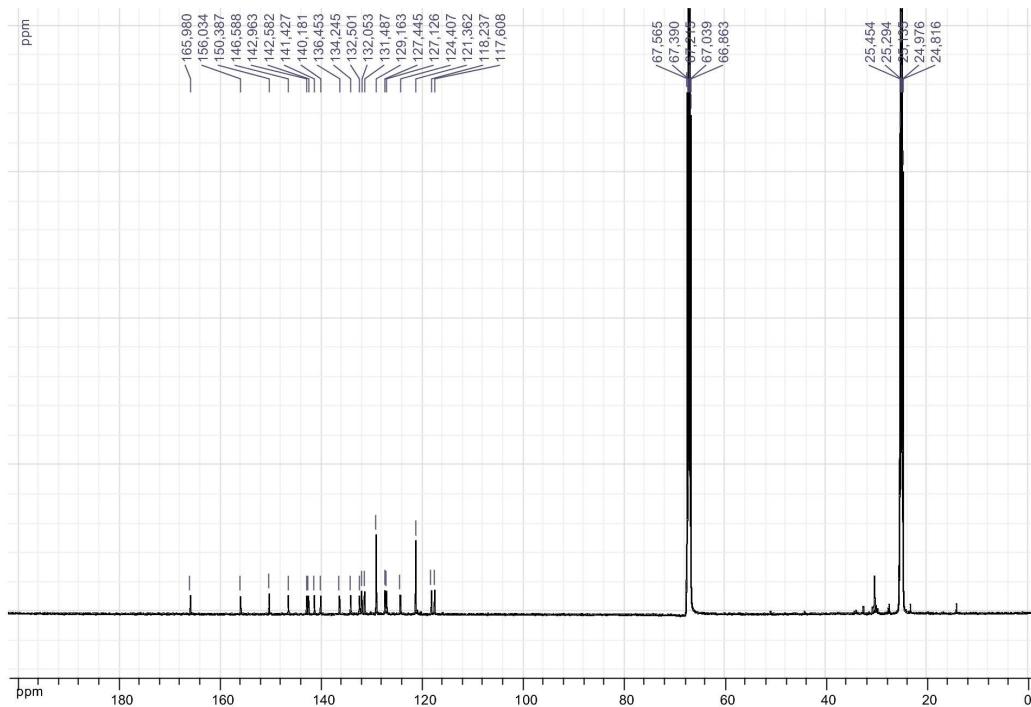


Fig. ESI 21 ^{13}C -NMR spectrum of helicate **14** in THF-d8.

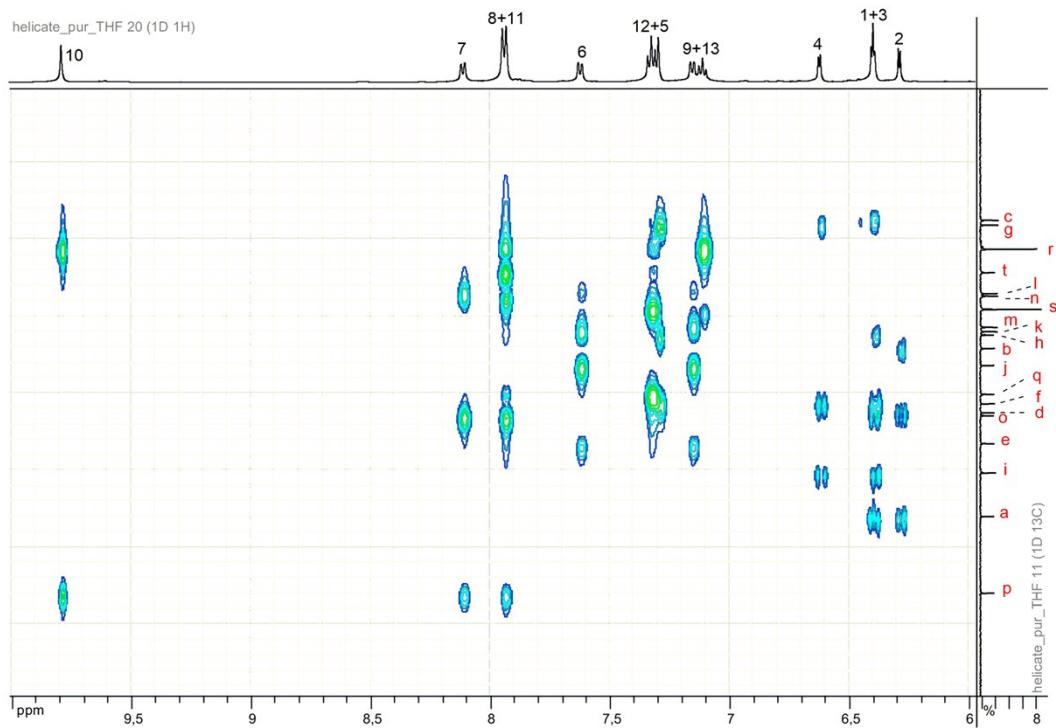
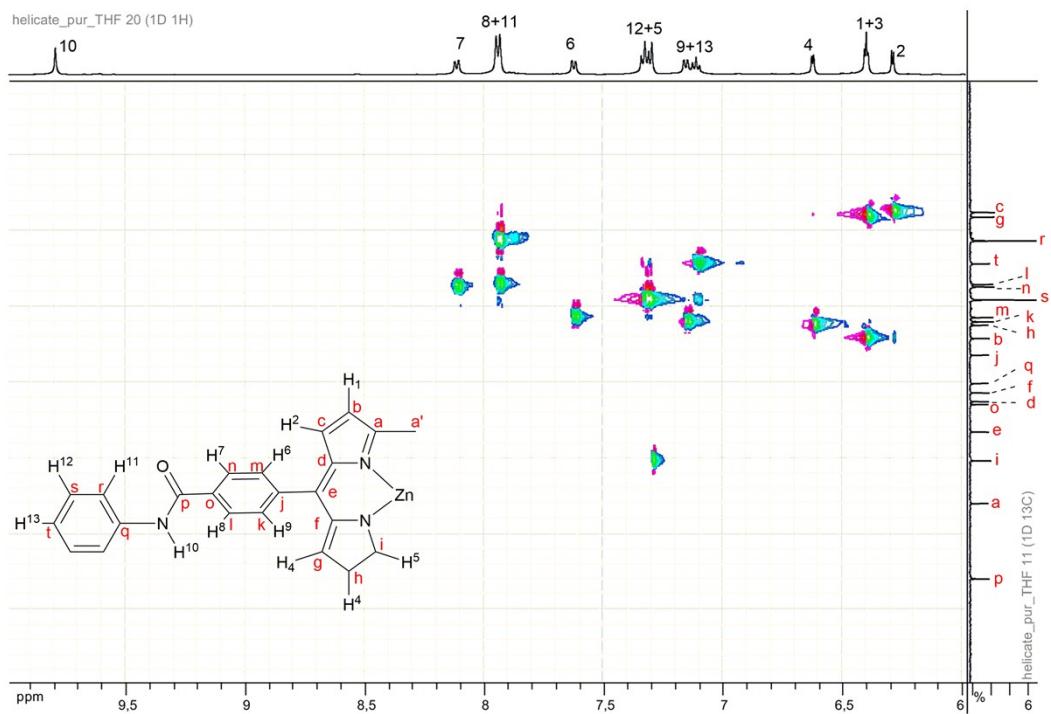


Fig. ESI 22 HSQC (top) and HMBC (bottom) correlation experiments of helicate **14** in THF-d8 (500 MHz). The numbering scheme used for the assignment of the proton and carbon atoms of a quarter of the helicate is shown as an insert.

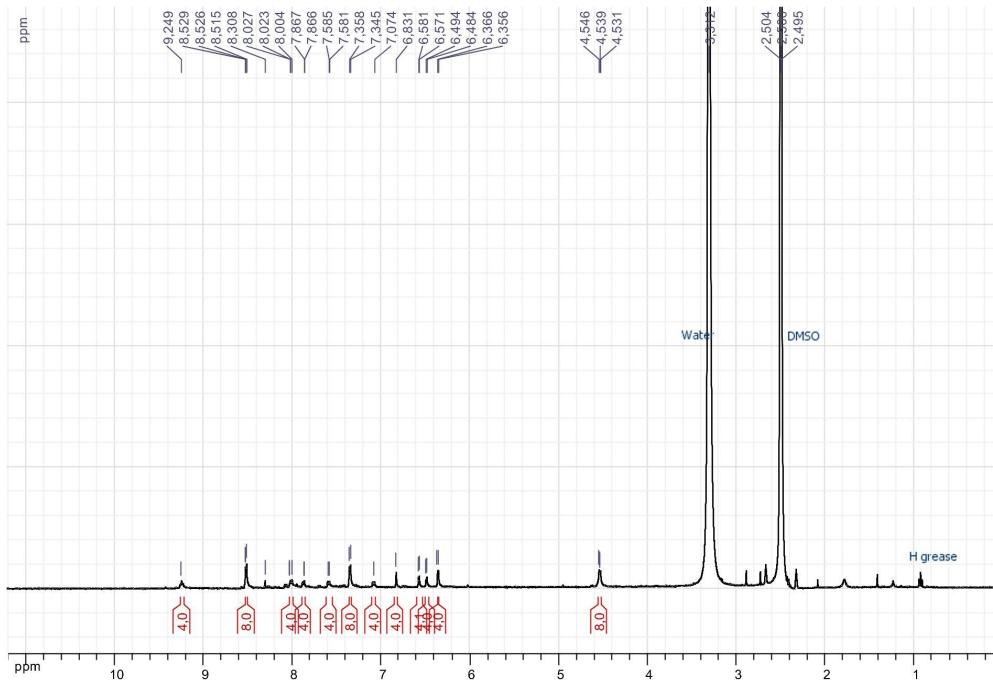


Fig. ESI 23. ^1H -NMR spectrum of helicate **15** in DMSO-d₆.

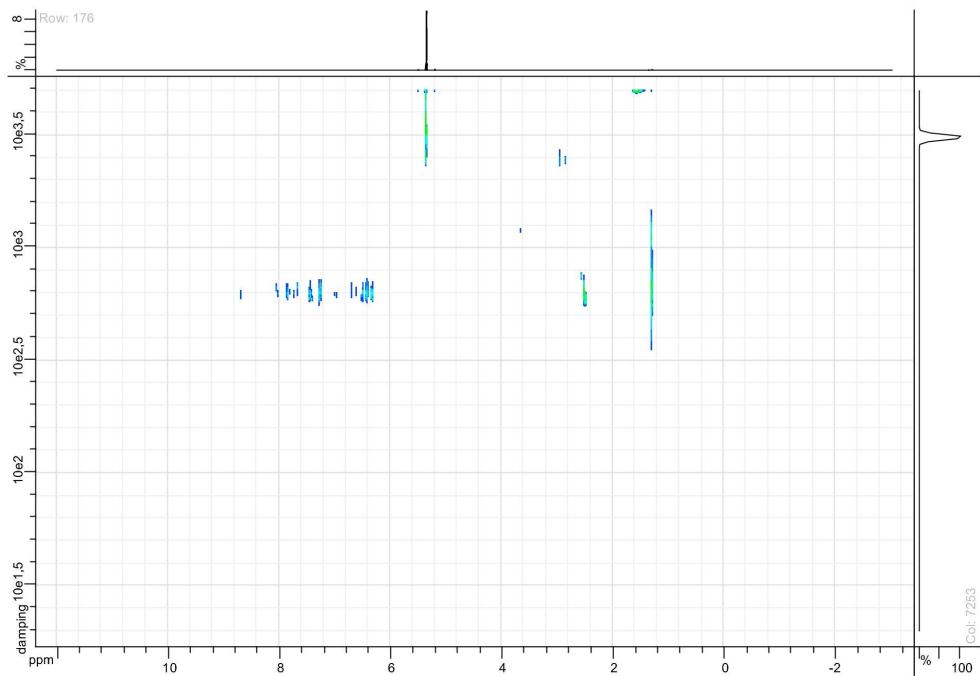


Fig. ESI24 DOSY NMR spectrum of **16** in CD₂Cl₂.

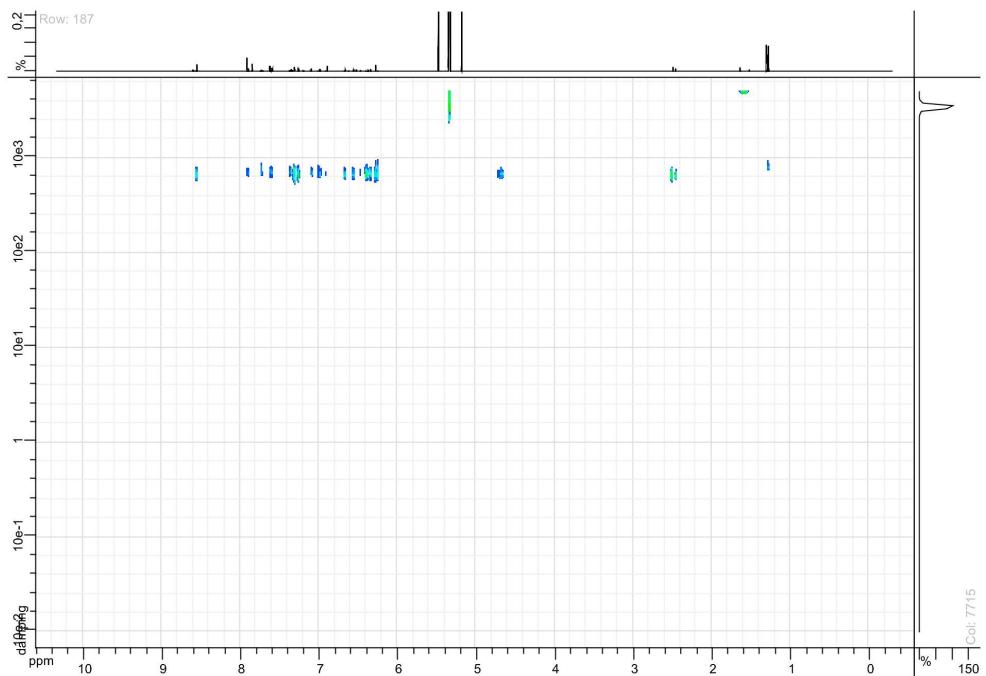


Fig. ESI25 DOSY NMR spectrum of **17** in CD_2Cl_2 .

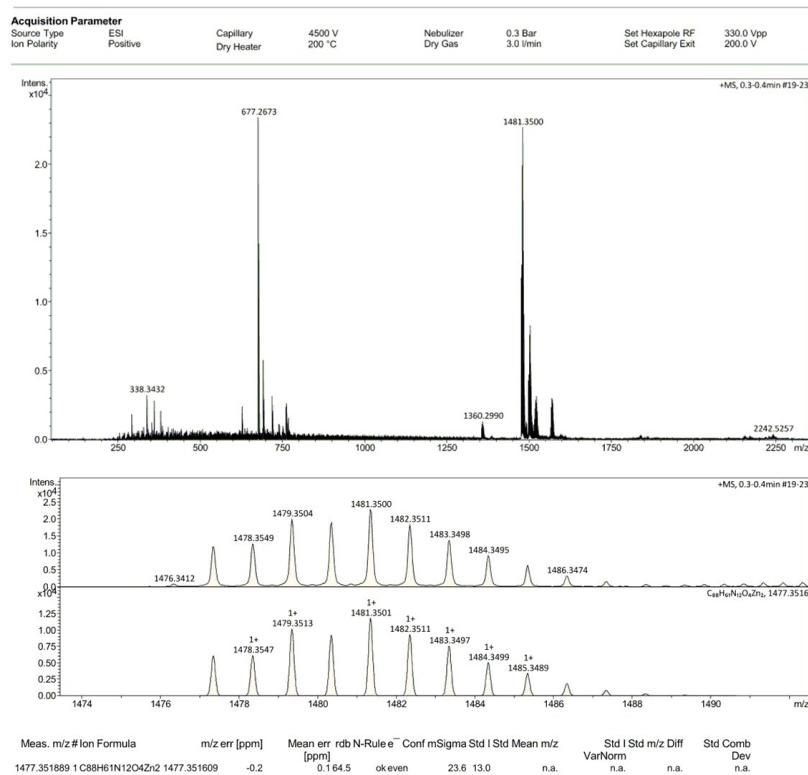


Fig. ESI26 HR ESI-MS of helicate **14**.

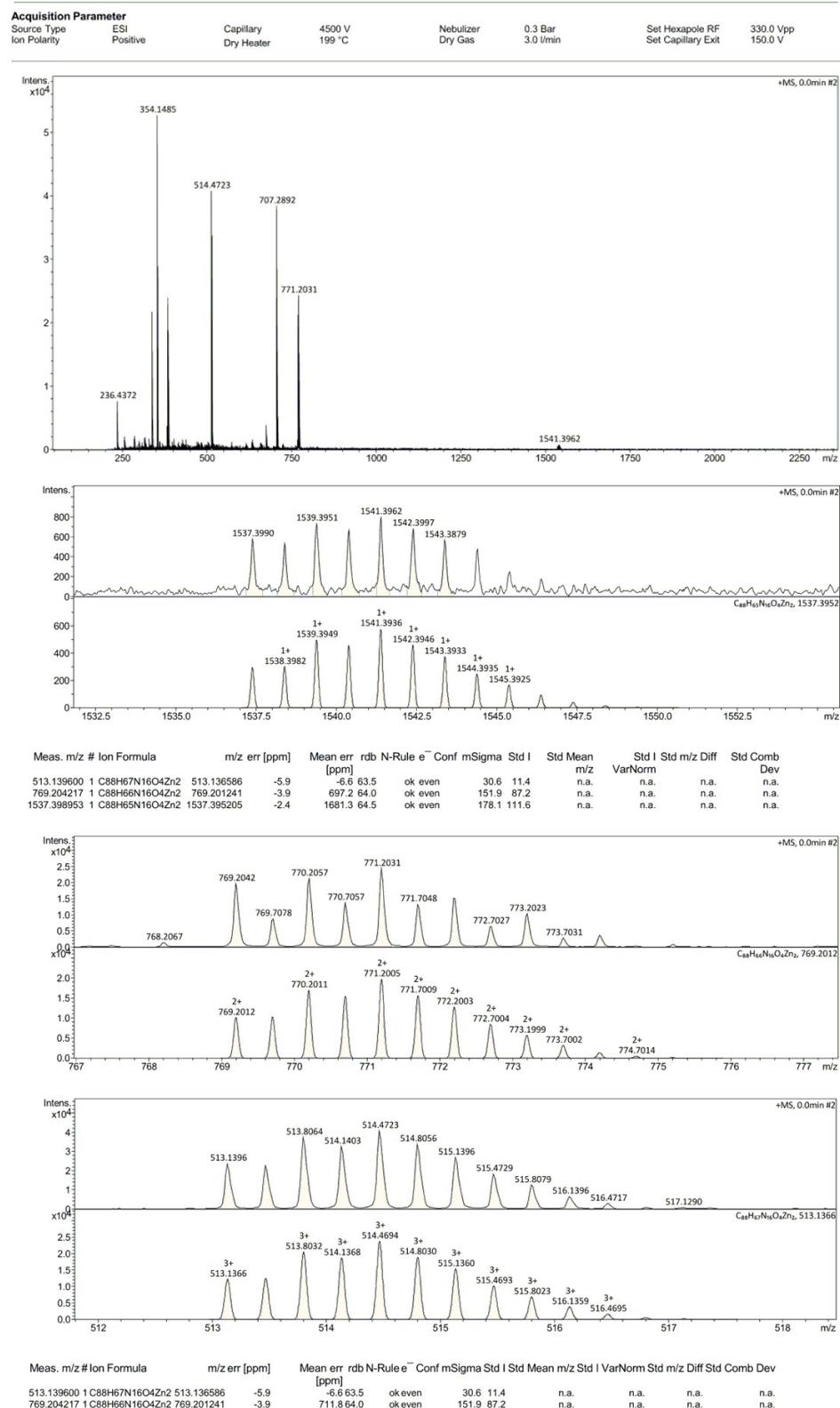


Fig. ESI27 HR ESI-MS of helicate 15.

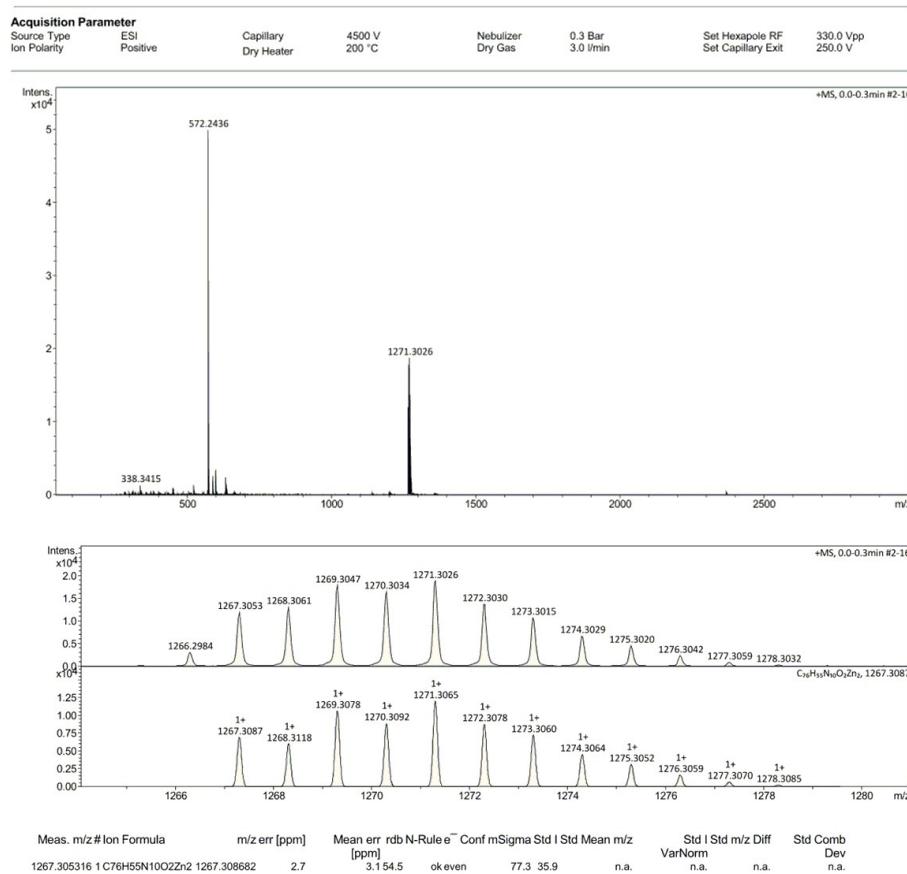


Fig. ESI28 HR ESI-MS of helicate **16.**

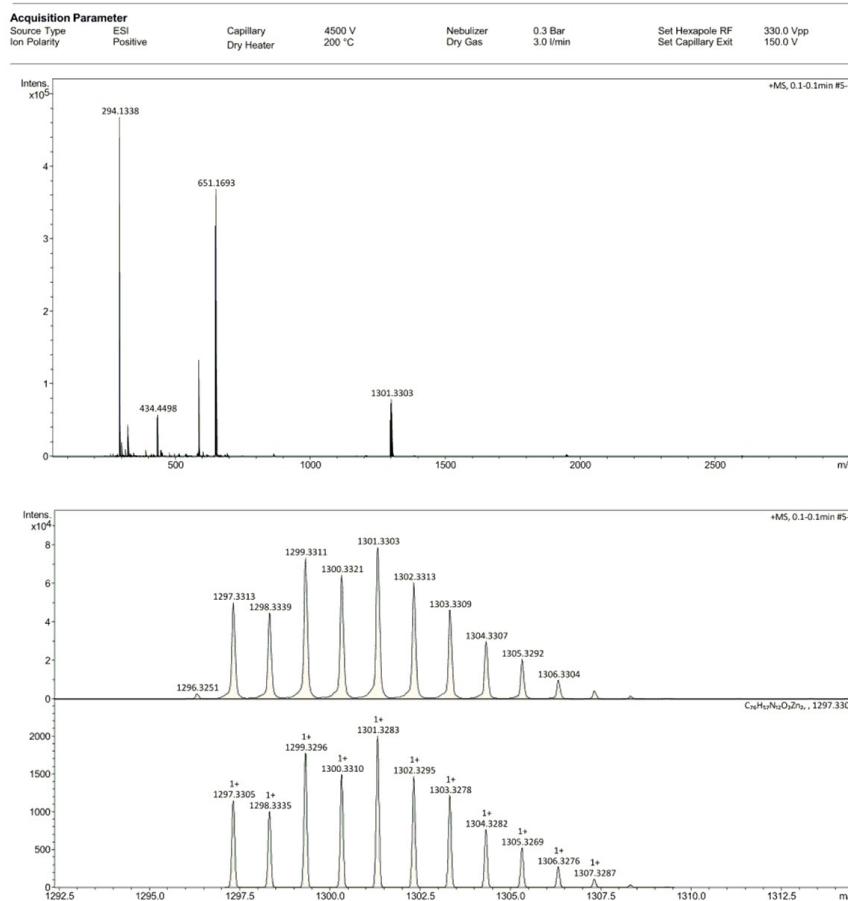


Fig. ESI29 HR ESI-MS of helicate 17.