

DIBAL-H mediated triple and quadruple debenzylations of perbenzylated cyclodextrins

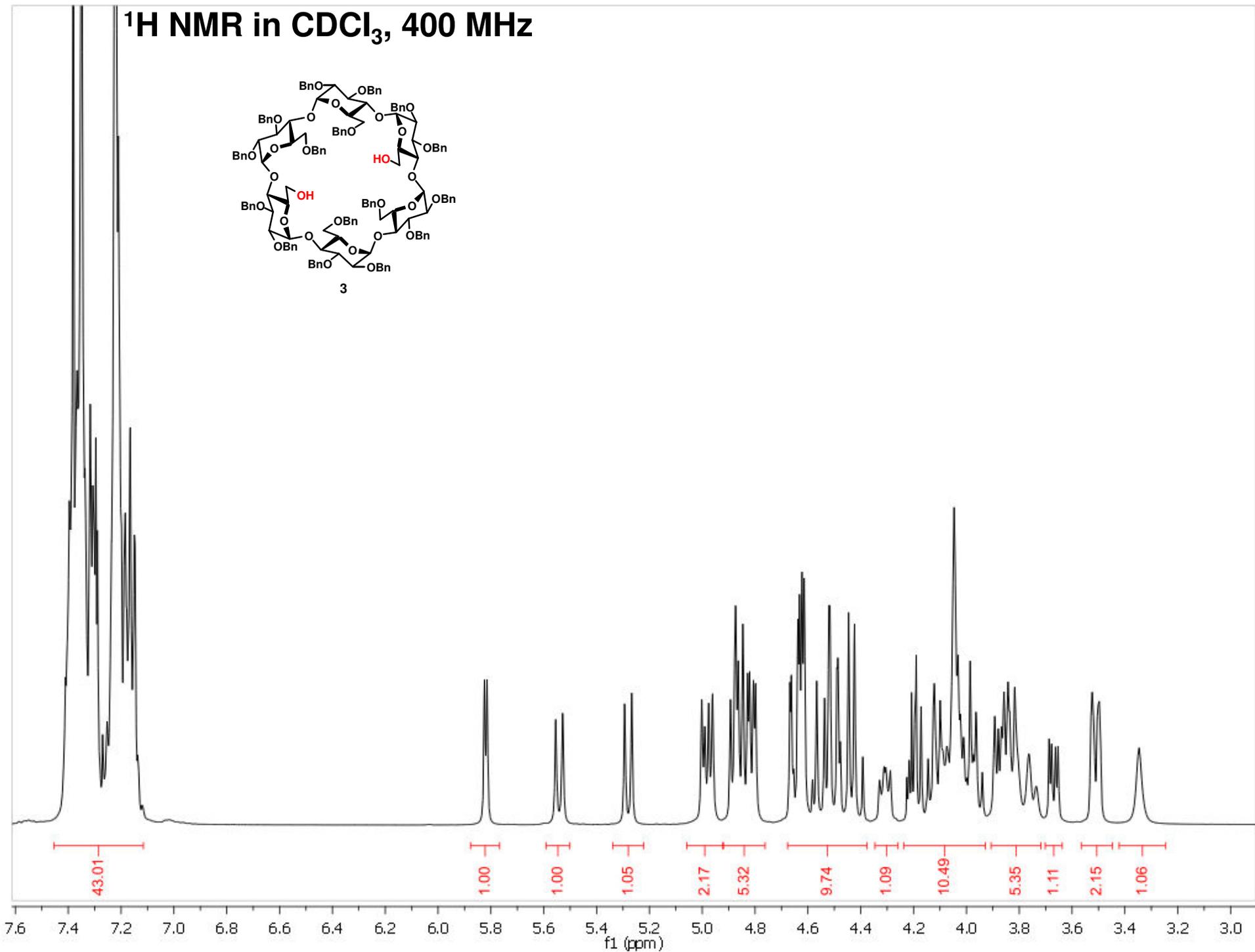
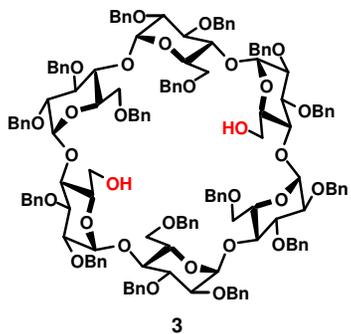
Girish K. Rawal, Shikha Rani, Sandra Ward and Chang-Chun Ling*

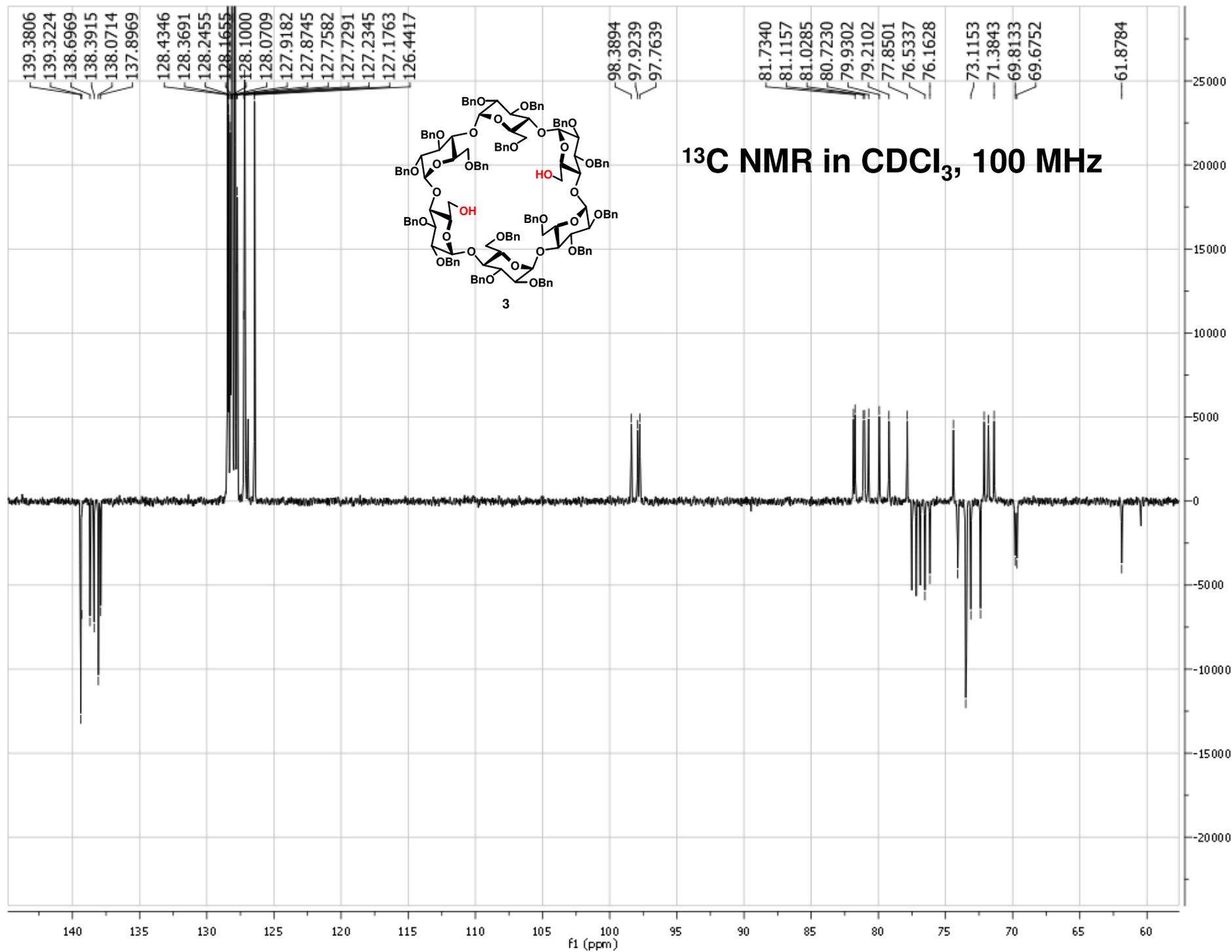
*Alberta Ingenuity Center for Carbohydrate Science,
Department of Chemistry, University of Calgary, Calgary Alberta T2N 1N4 Canada.
E-mail: ccling@ucalgary.ca*

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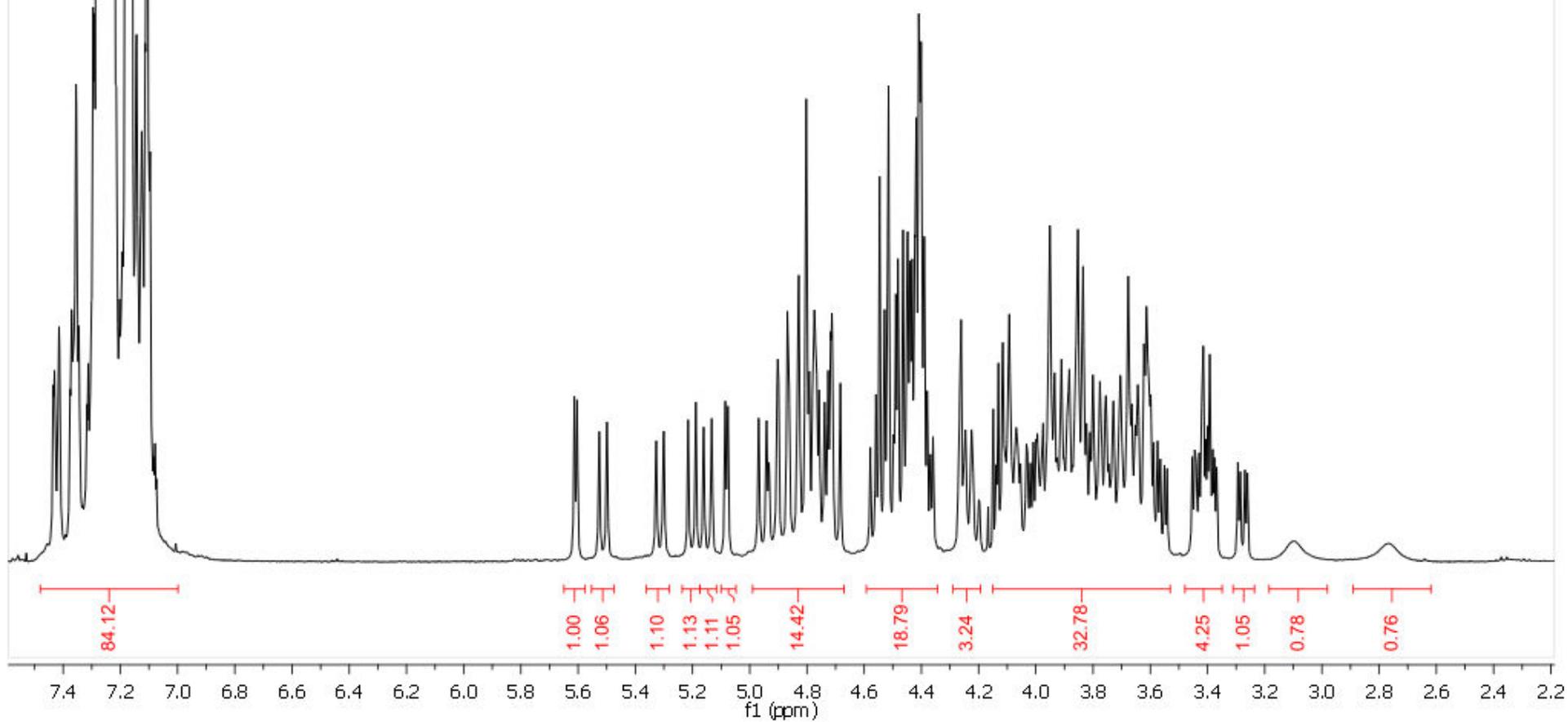
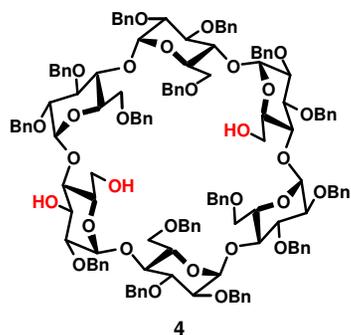
1. ^1H and ^{13}C spectra of synthesized compounds.....	S2-S58
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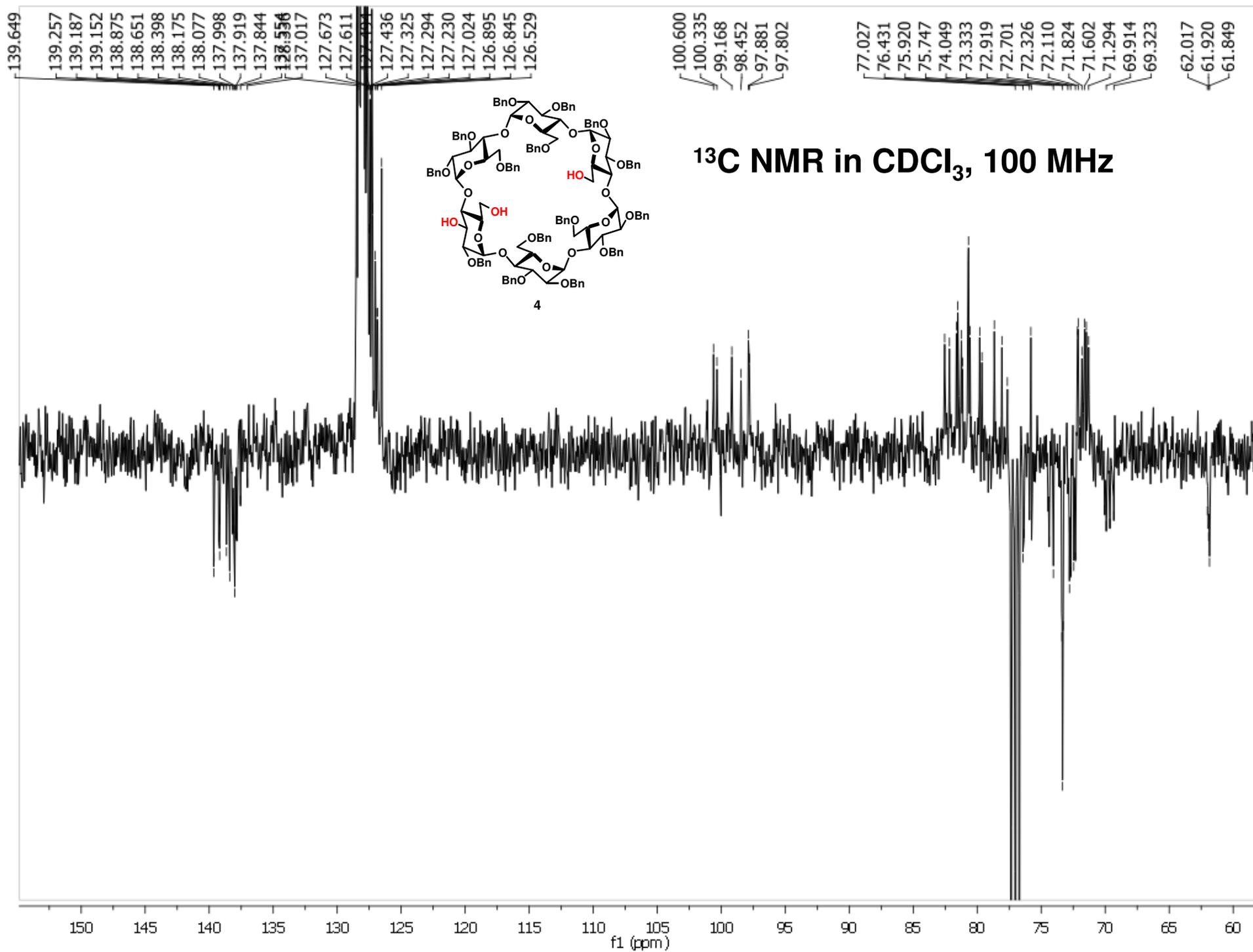
¹H NMR in CDCl₃, 400 MHz



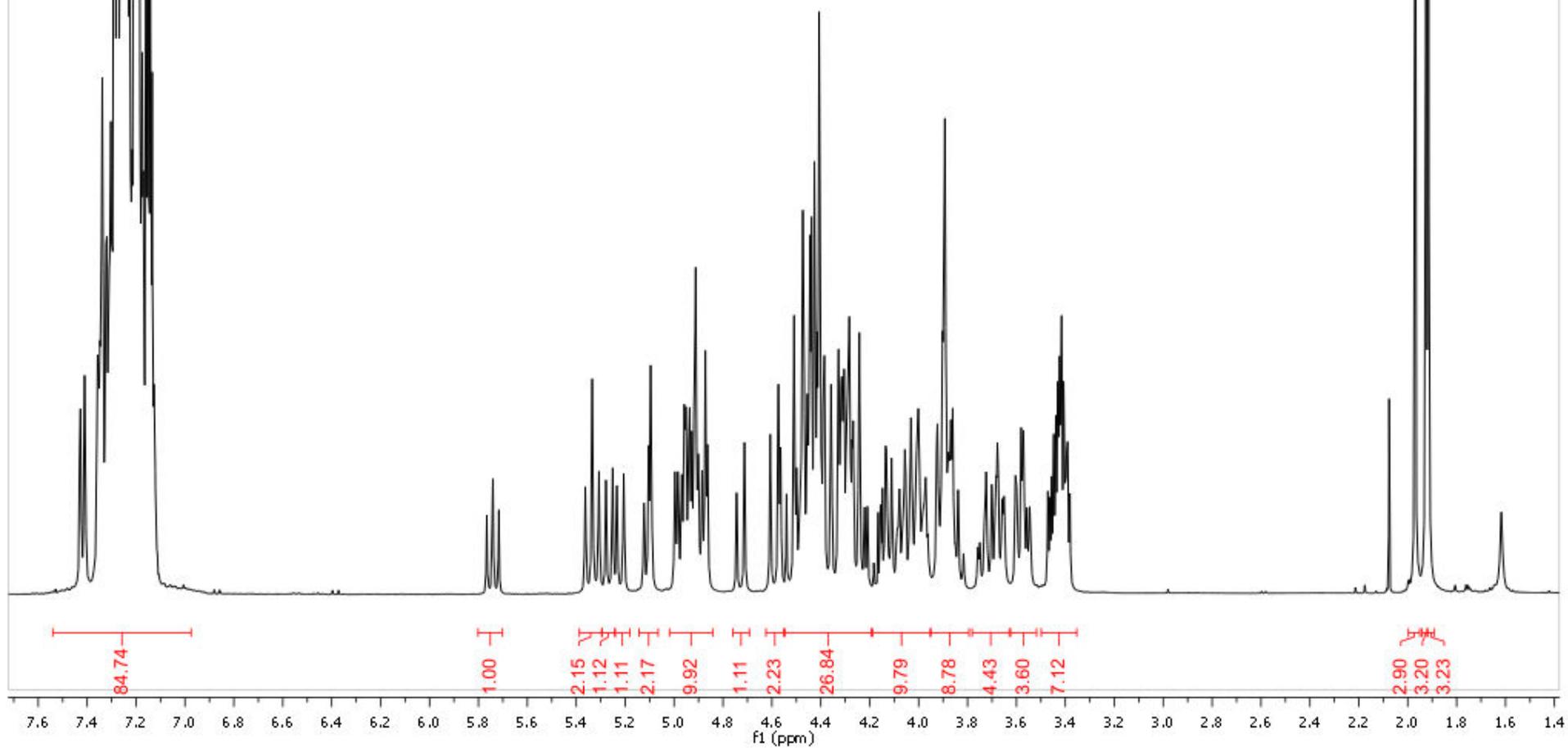
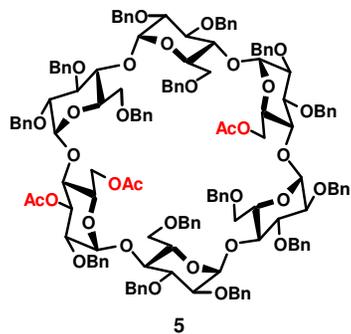


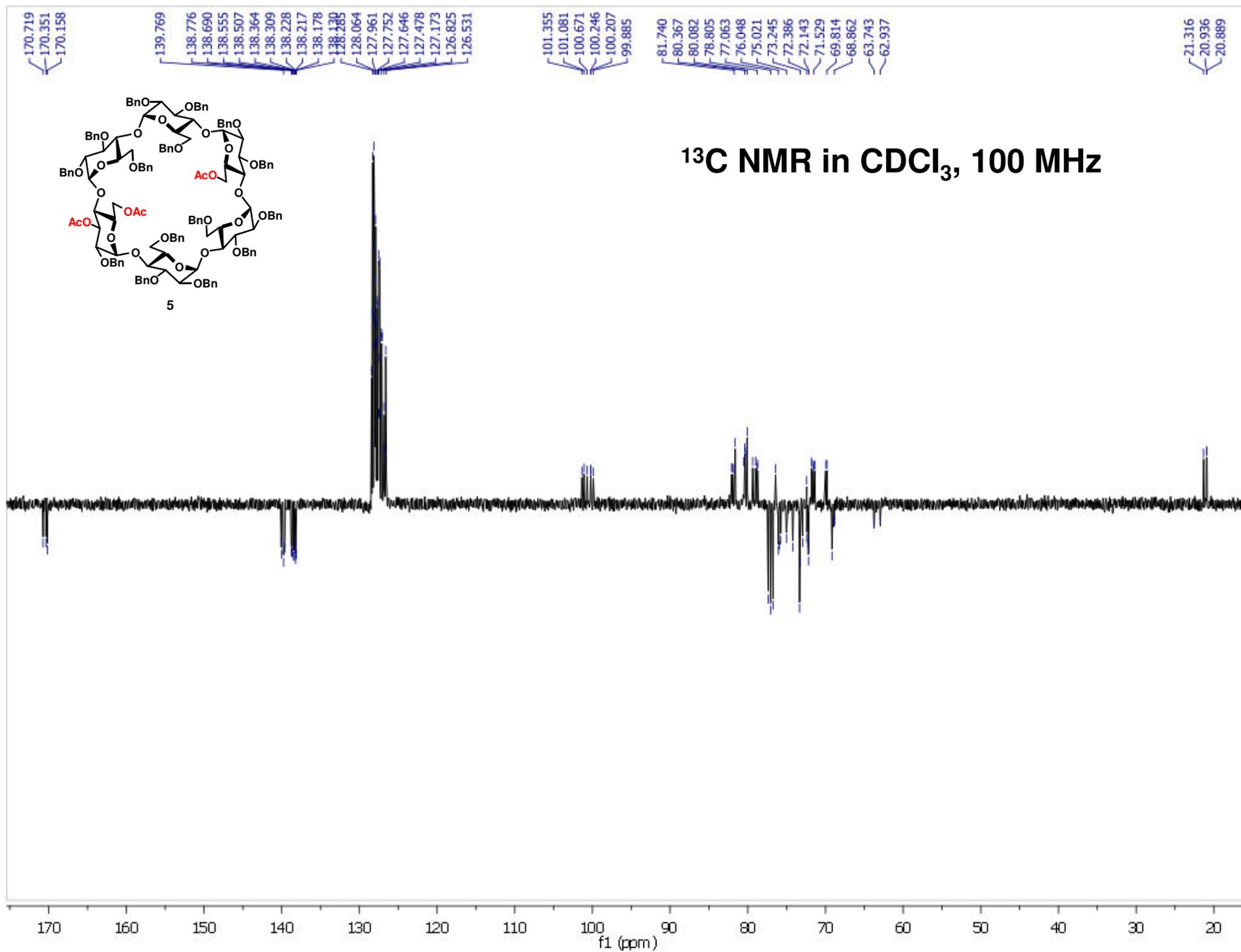
¹H NMR in CDCl₃, 400 MHz



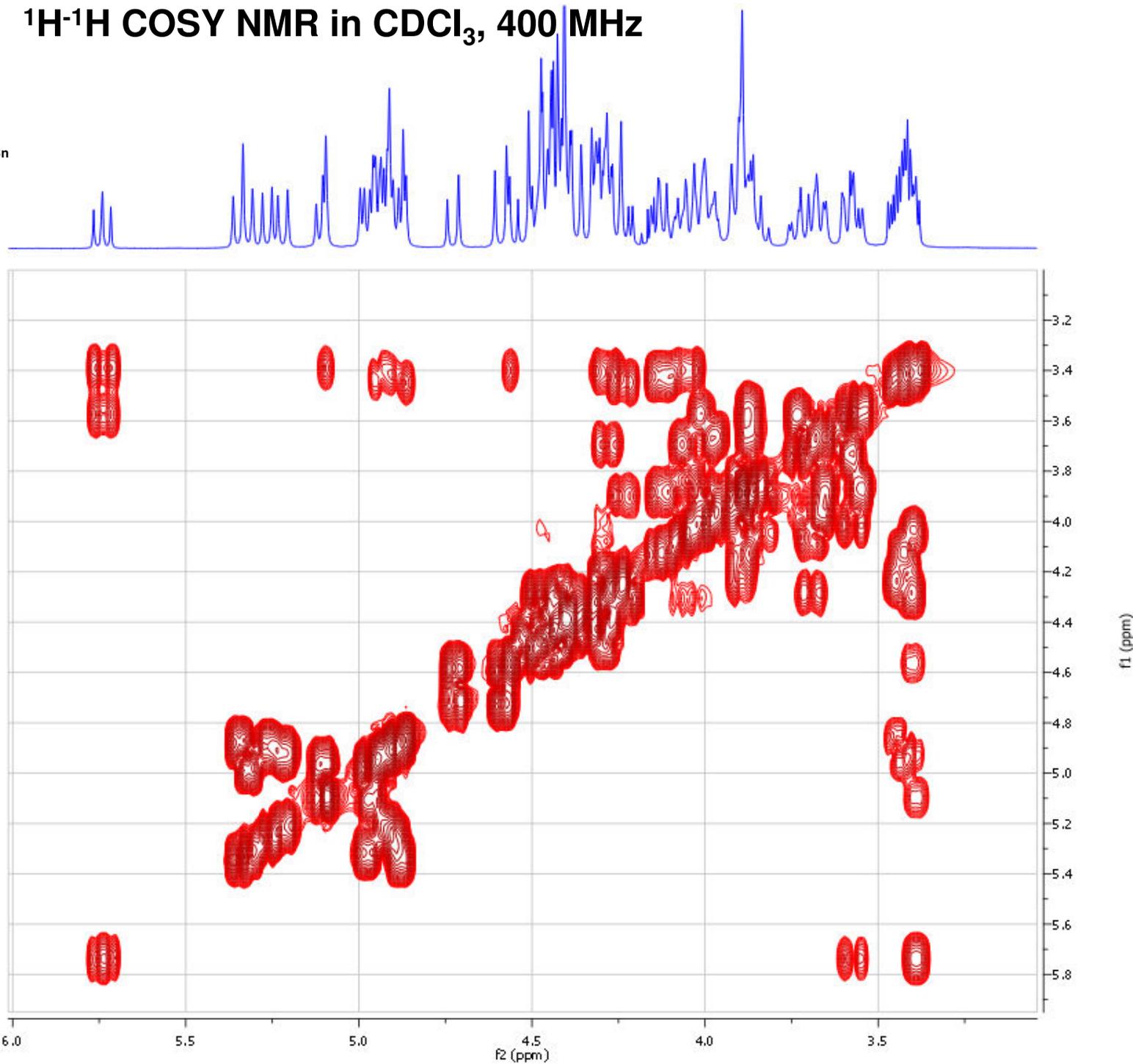
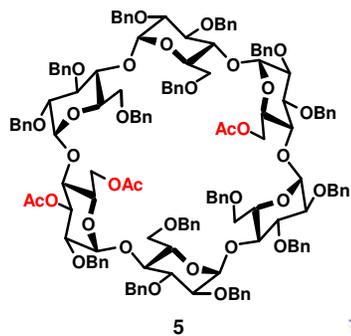


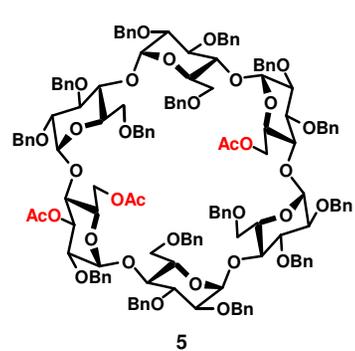
¹H NMR in CDCl₃, 400 MHz



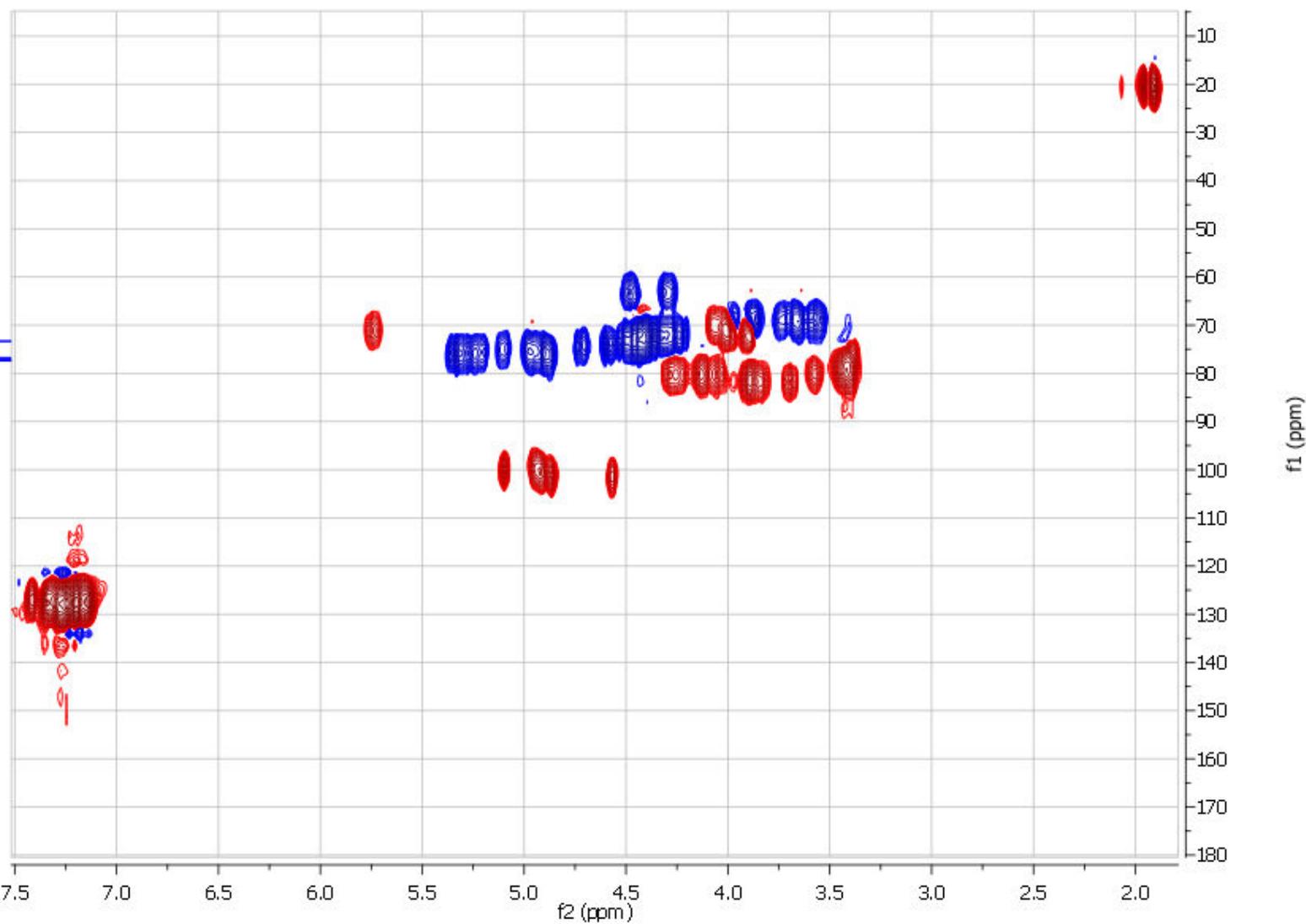
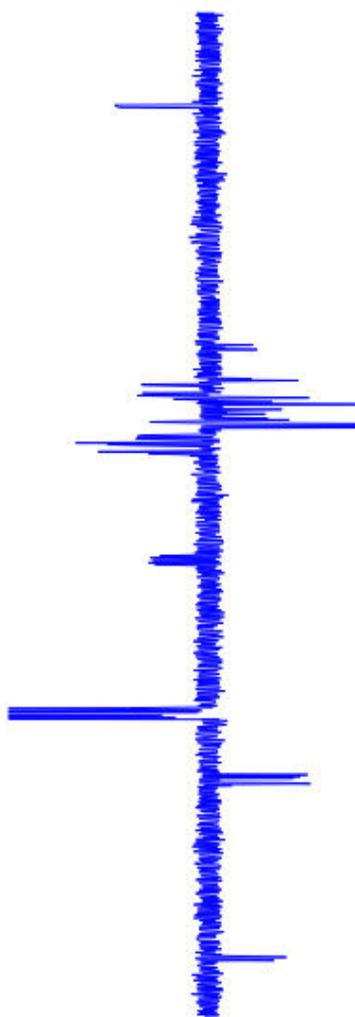
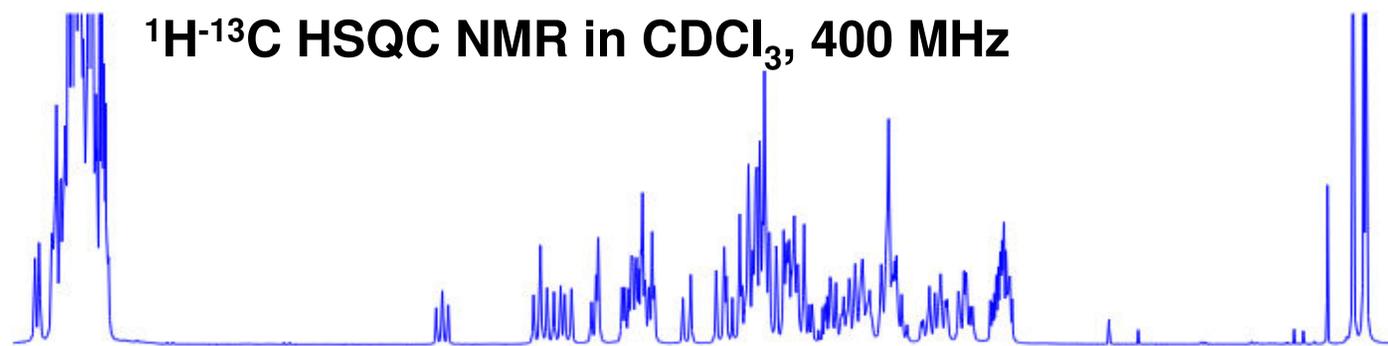


^1H - ^1H COSY NMR in CDCl_3 , 400 MHz





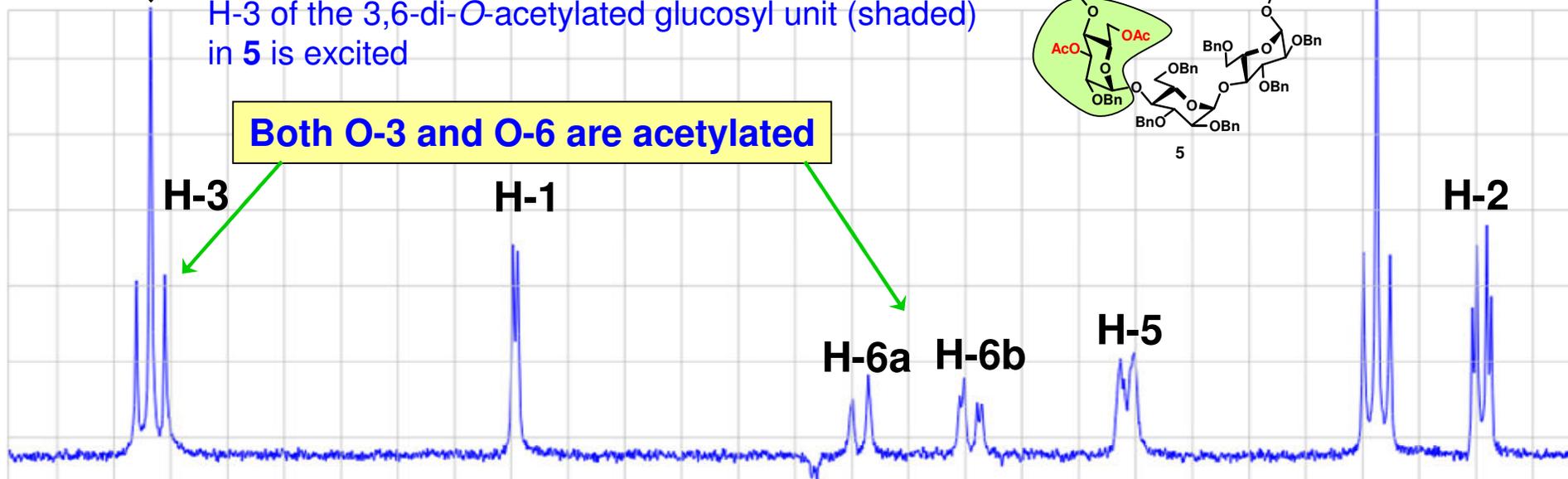
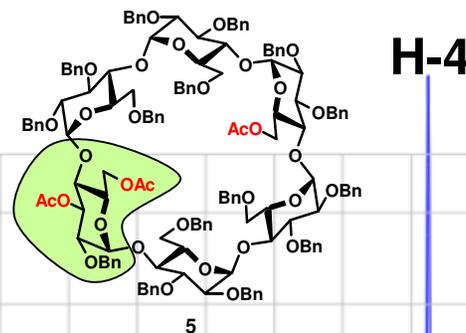
^1H - ^{13}C HSQC NMR in CDCl_3 , 400 MHz



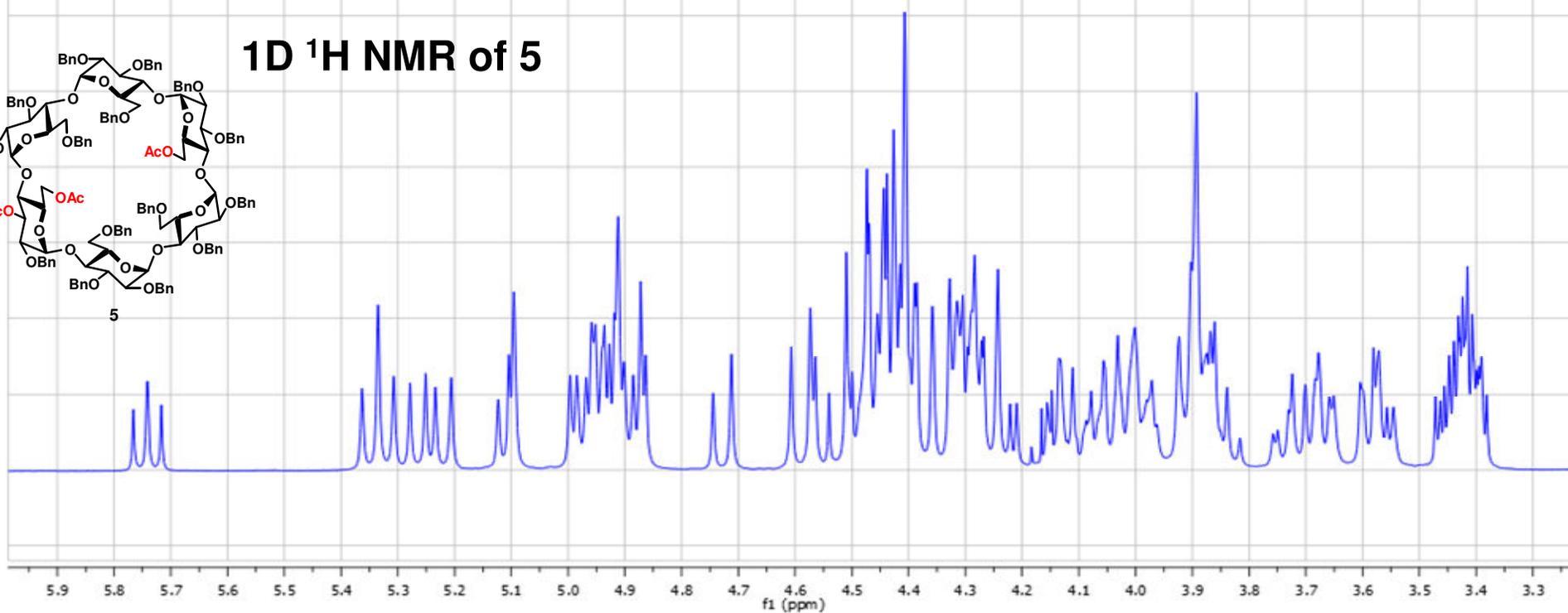
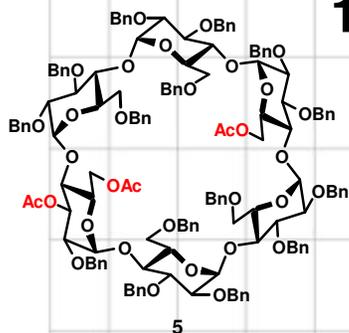
Selective 1D ^1H TOCSY Experiment

H-3 of the 3,6-di-O-acetylated glucosyl unit (shaded) in **5** is excited

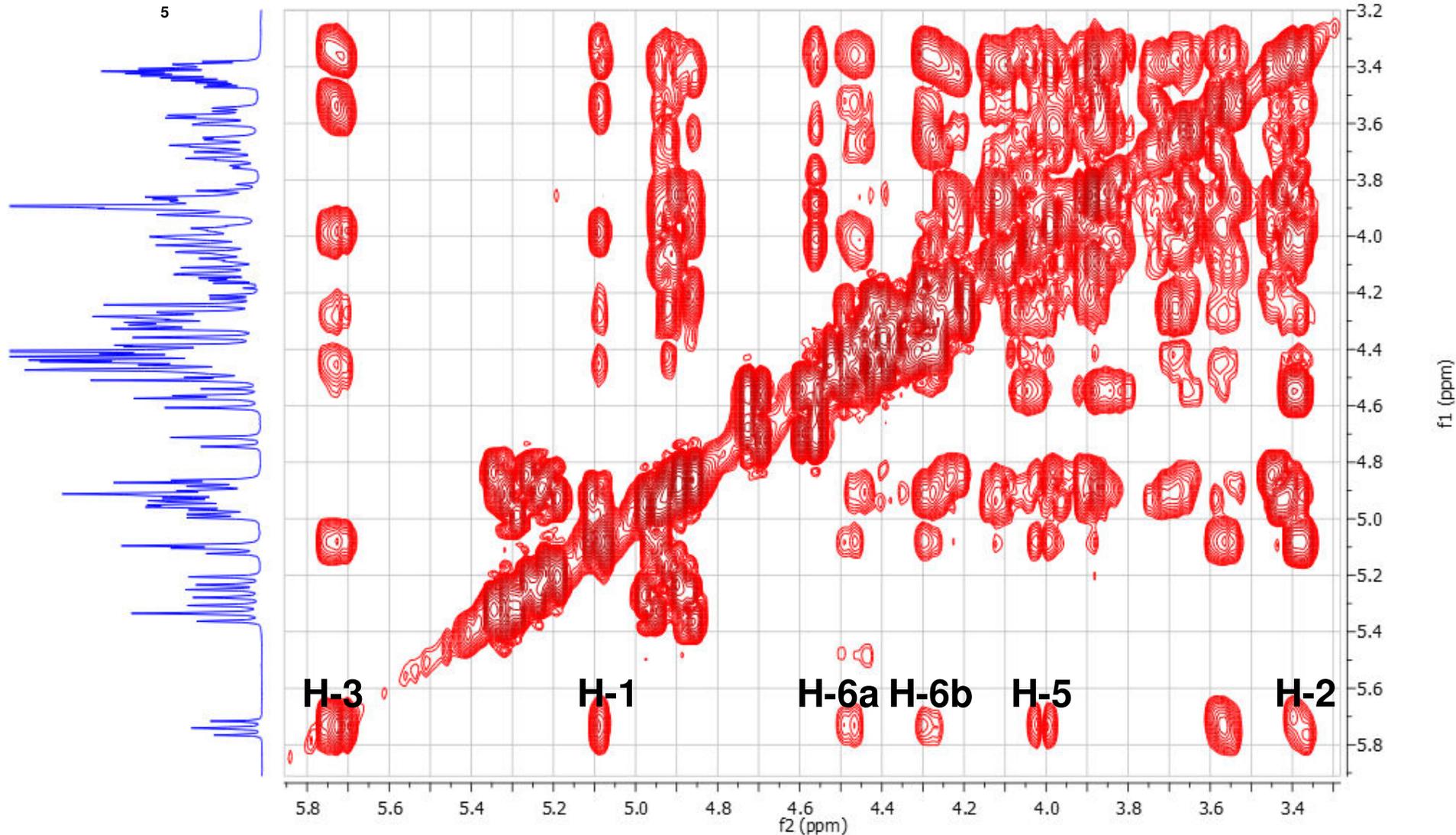
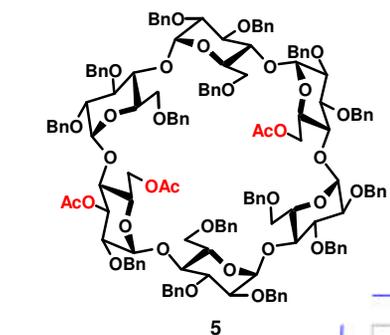
Both O-3 and O-6 are acetylated



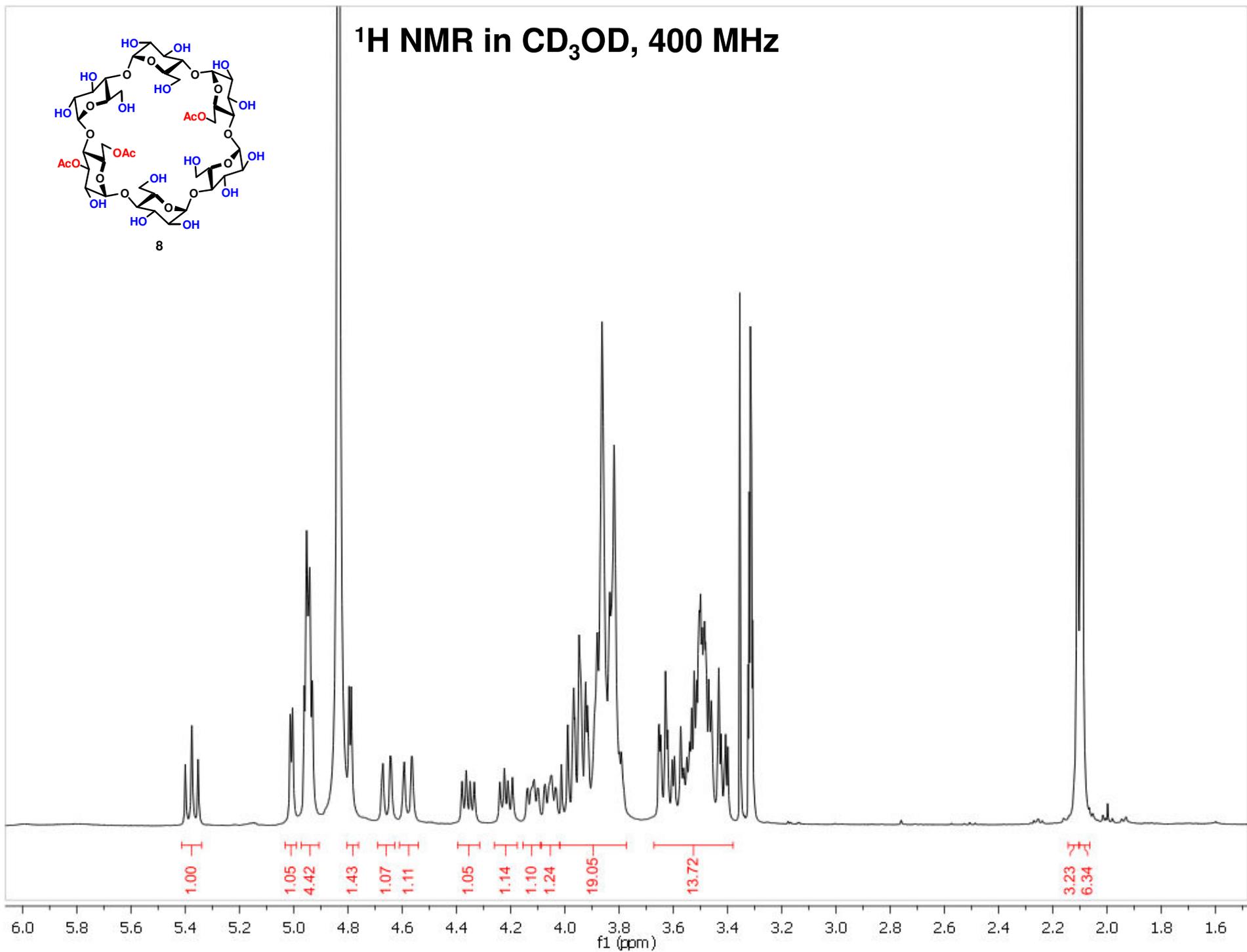
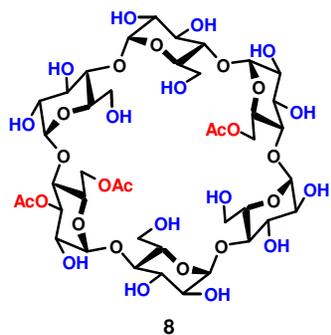
1D ^1H NMR of **5**

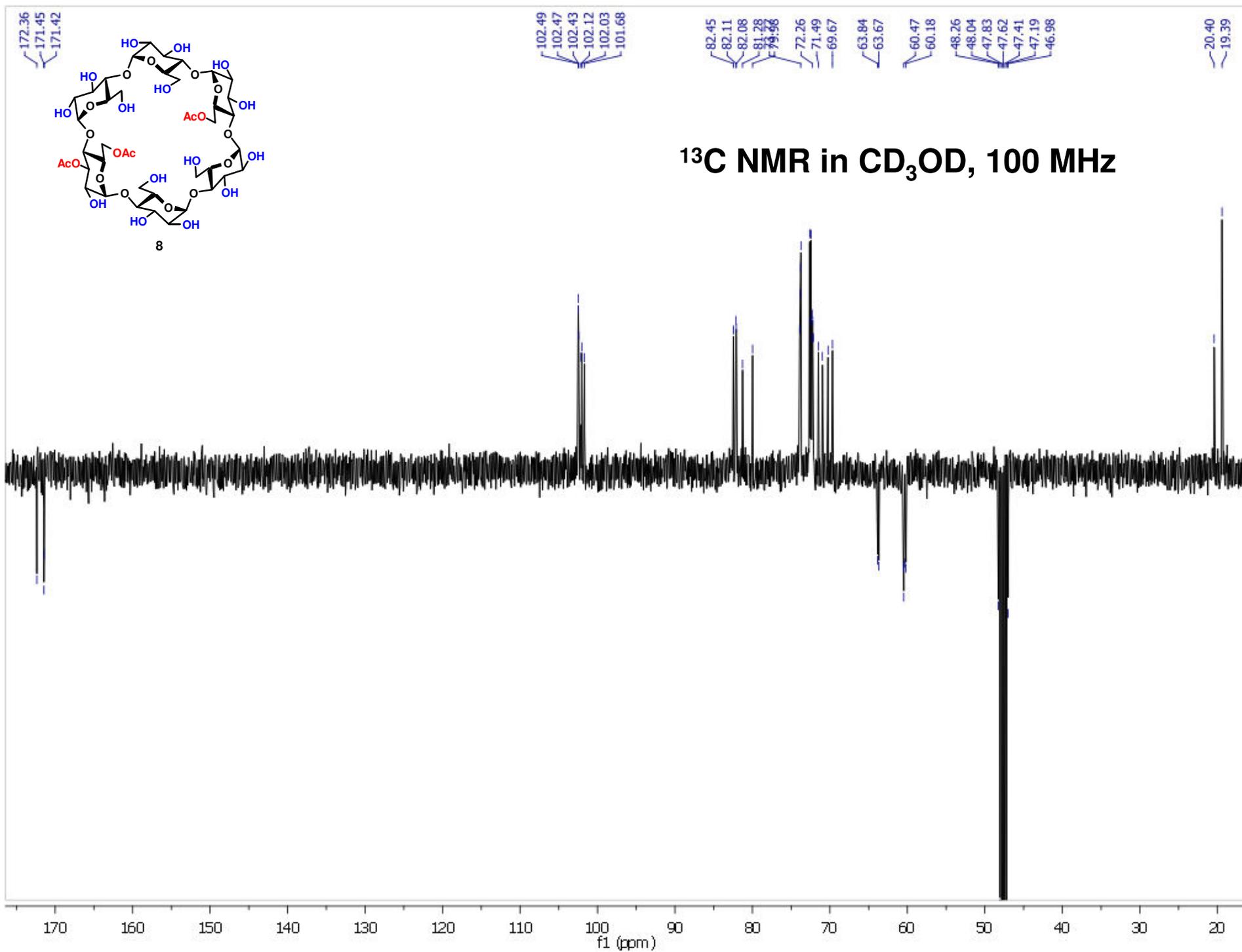


^1H - ^1H TOCSY NMR in CDCl_3 , 400 MHz

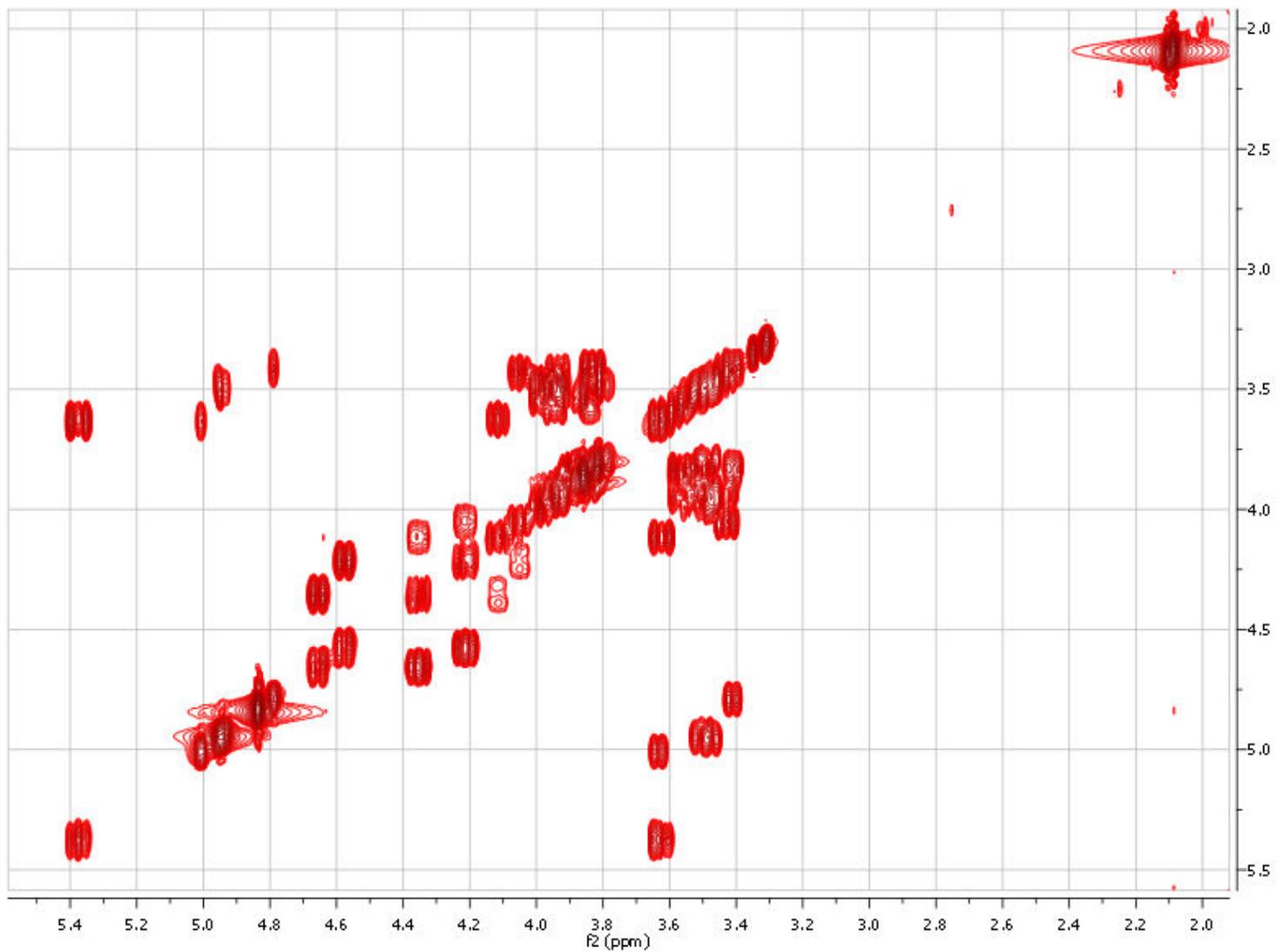
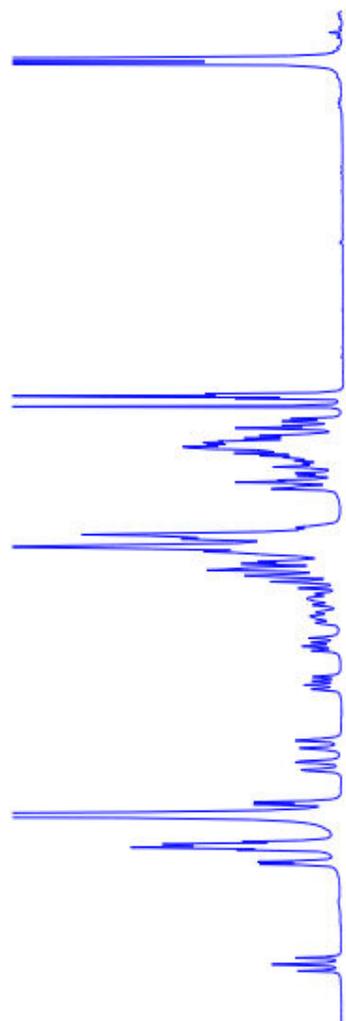
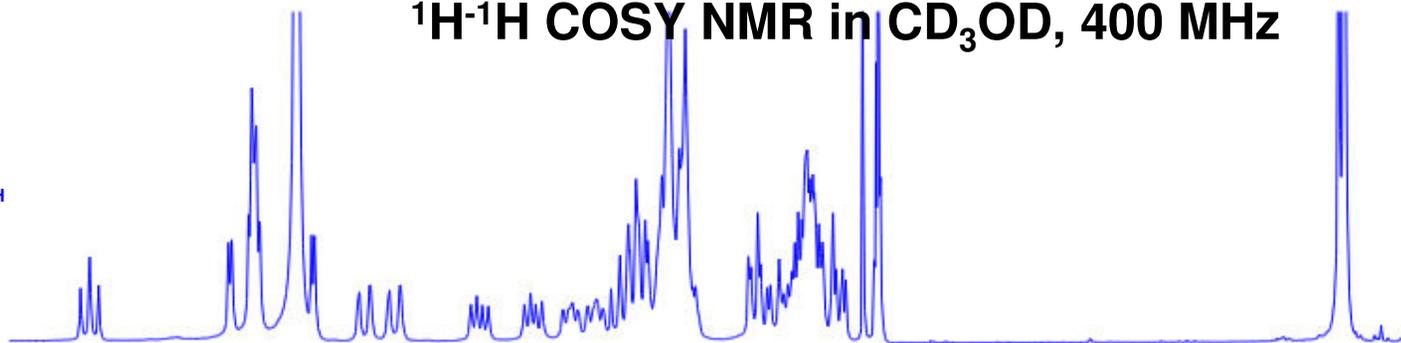
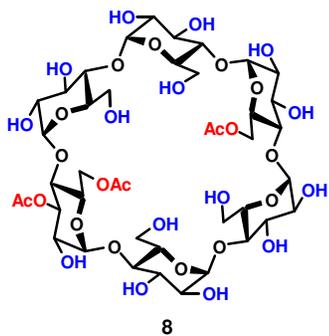


¹H NMR in CD₃OD, 400 MHz

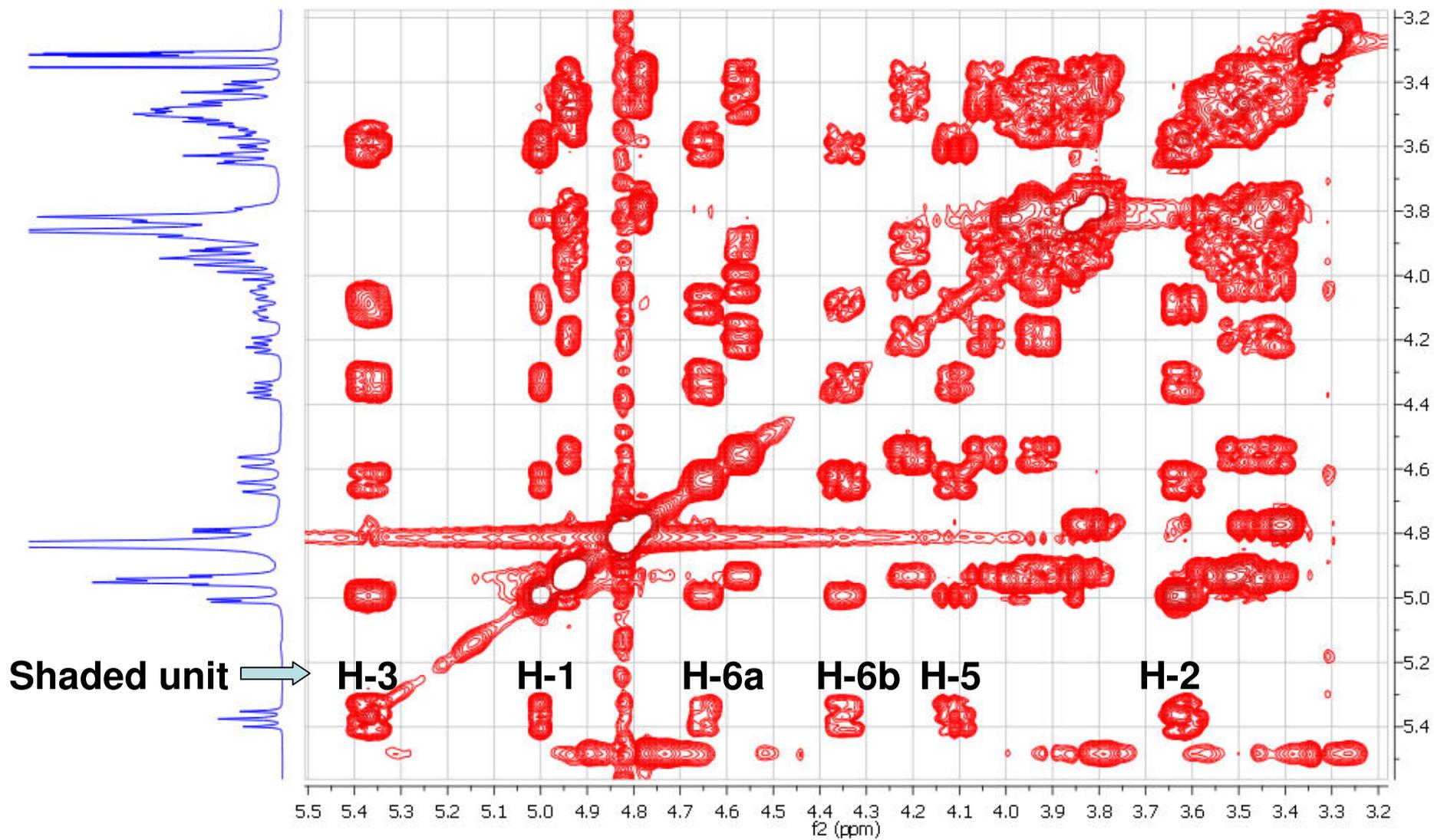
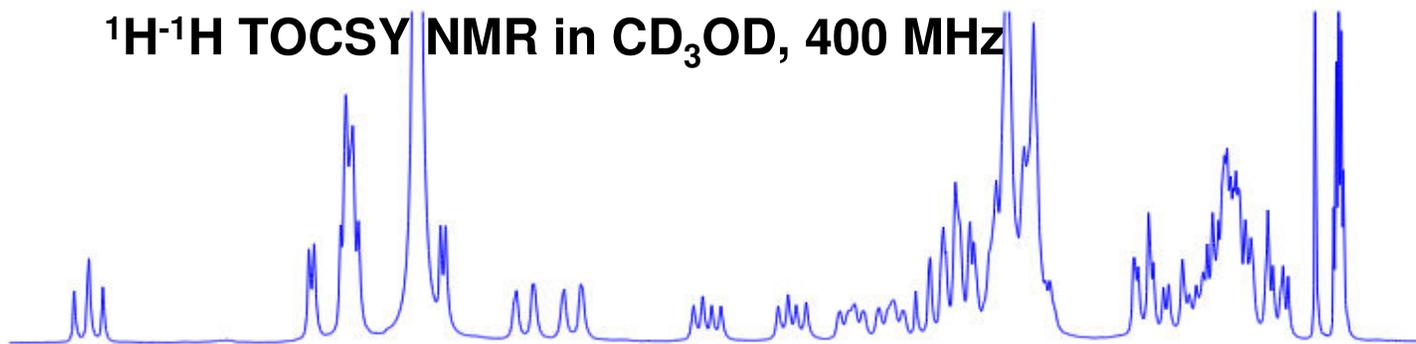
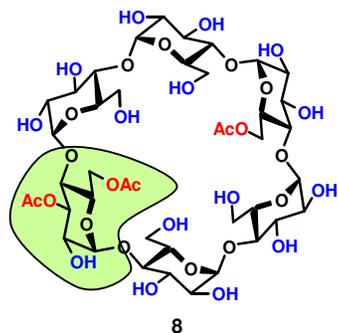


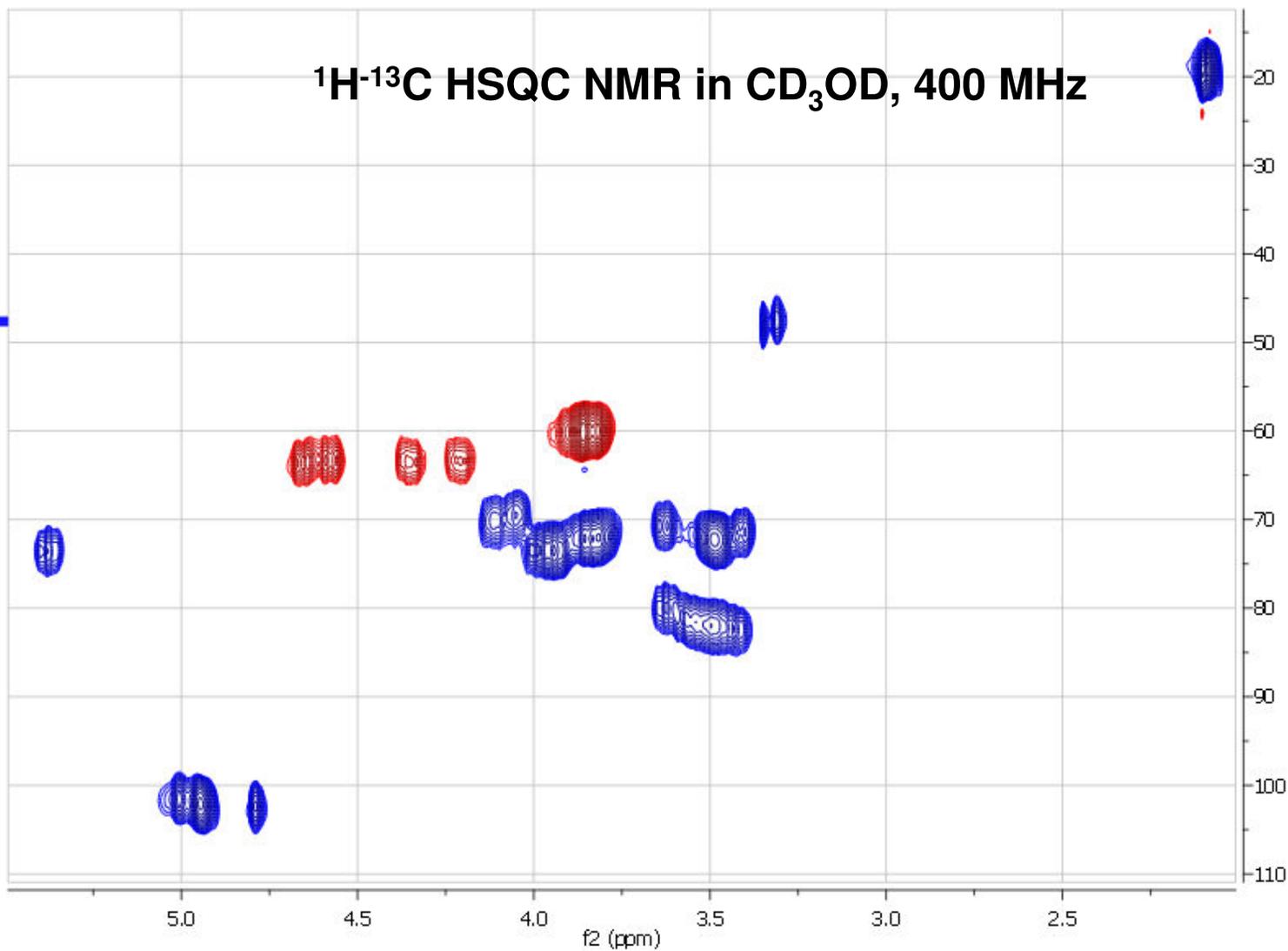
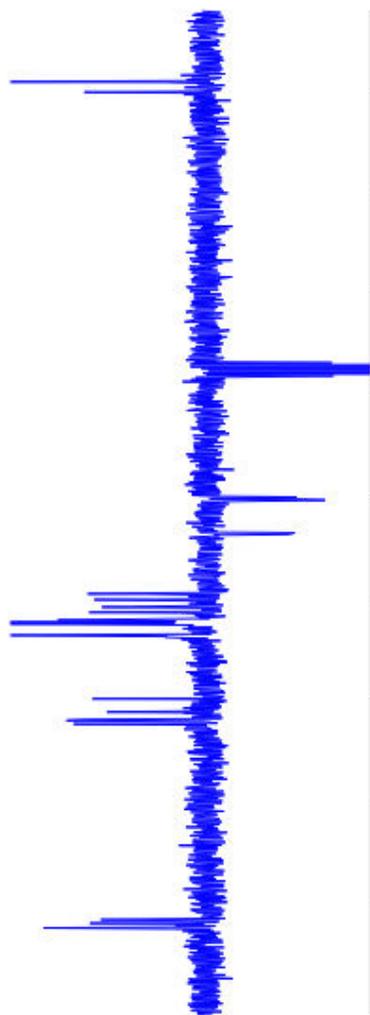
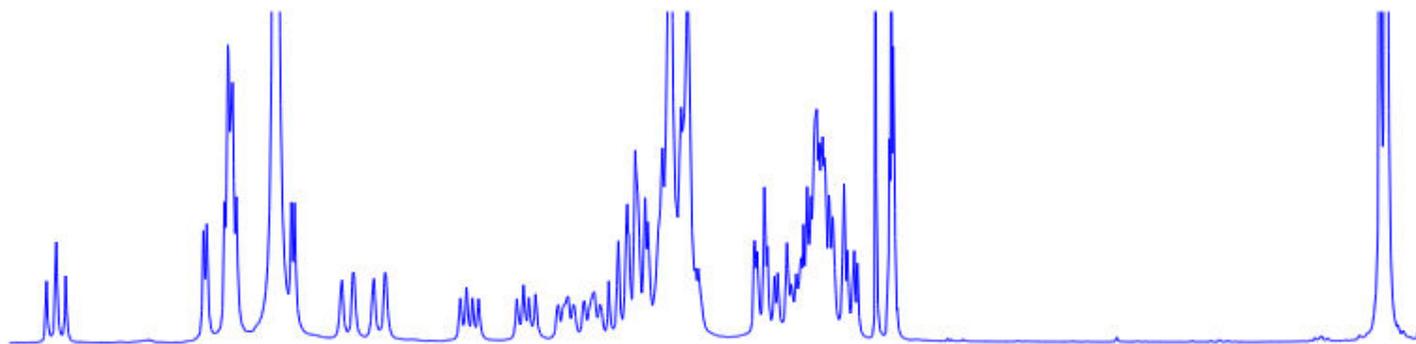
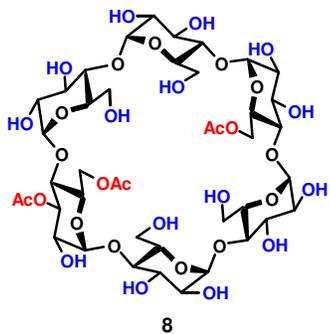


^1H - ^1H COSY NMR in CD_3OD , 400 MHz

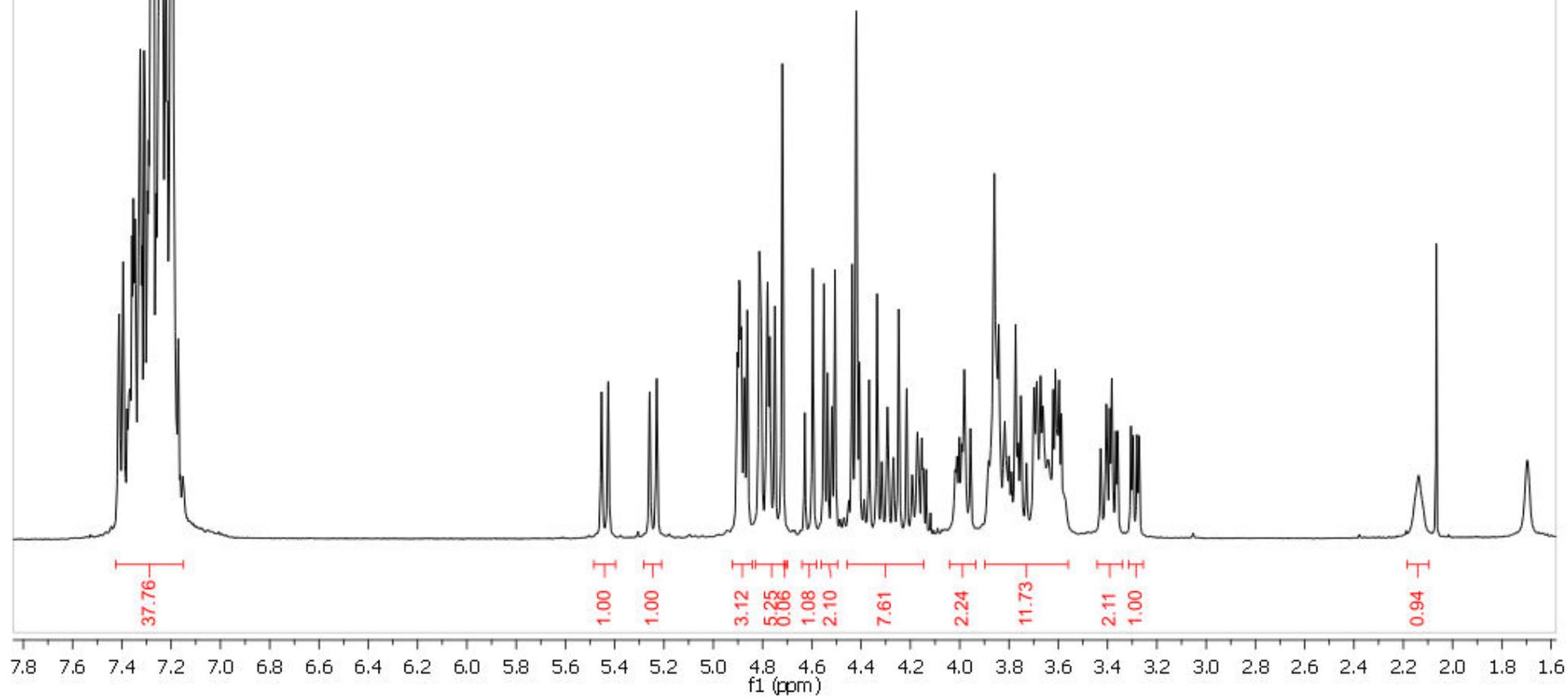
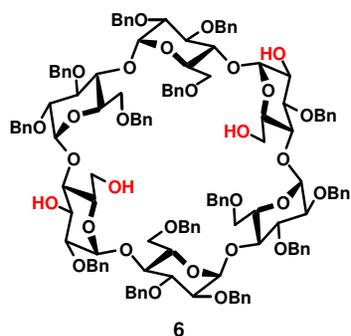


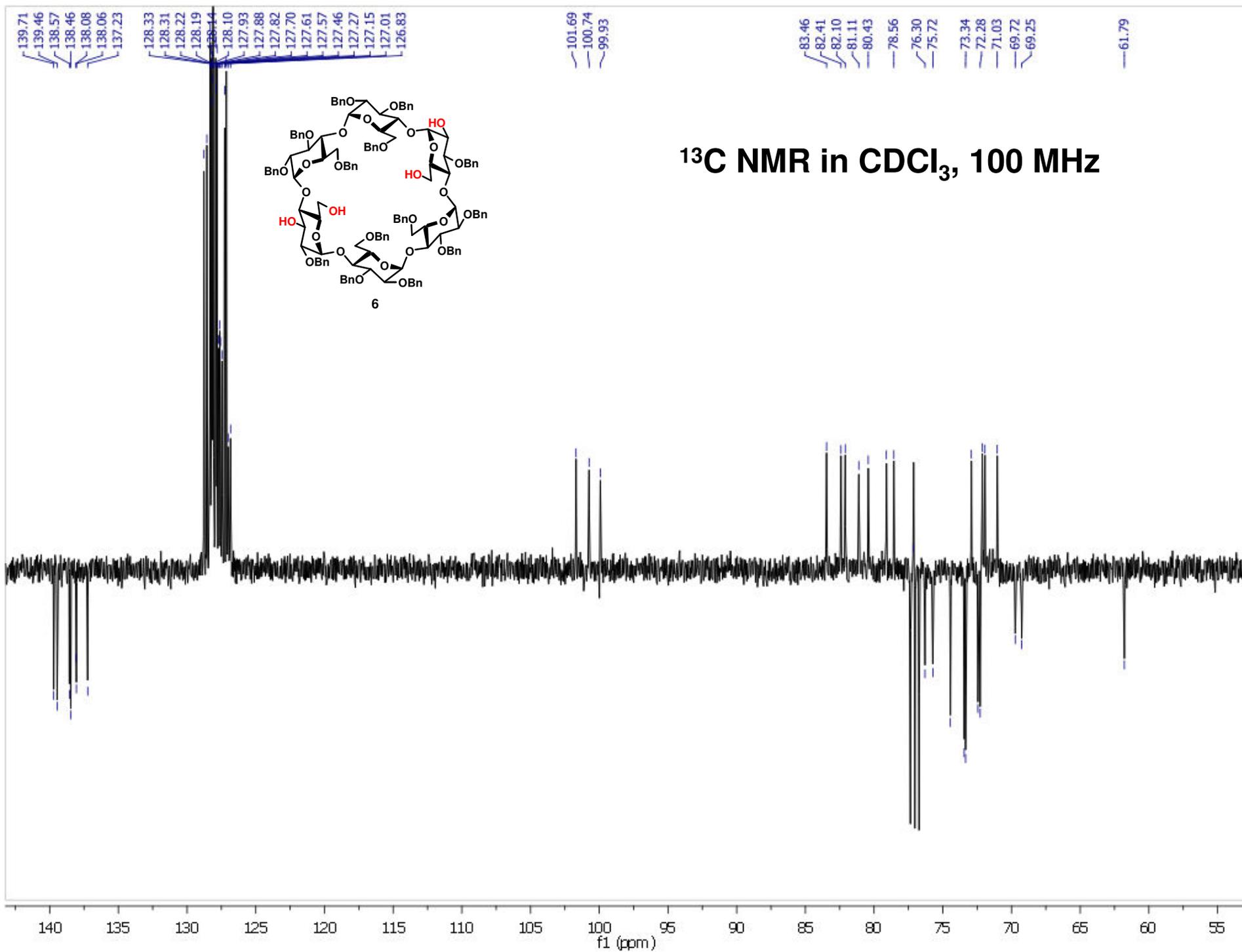
^1H - ^1H TOCSY NMR in CD_3OD , 400 MHz



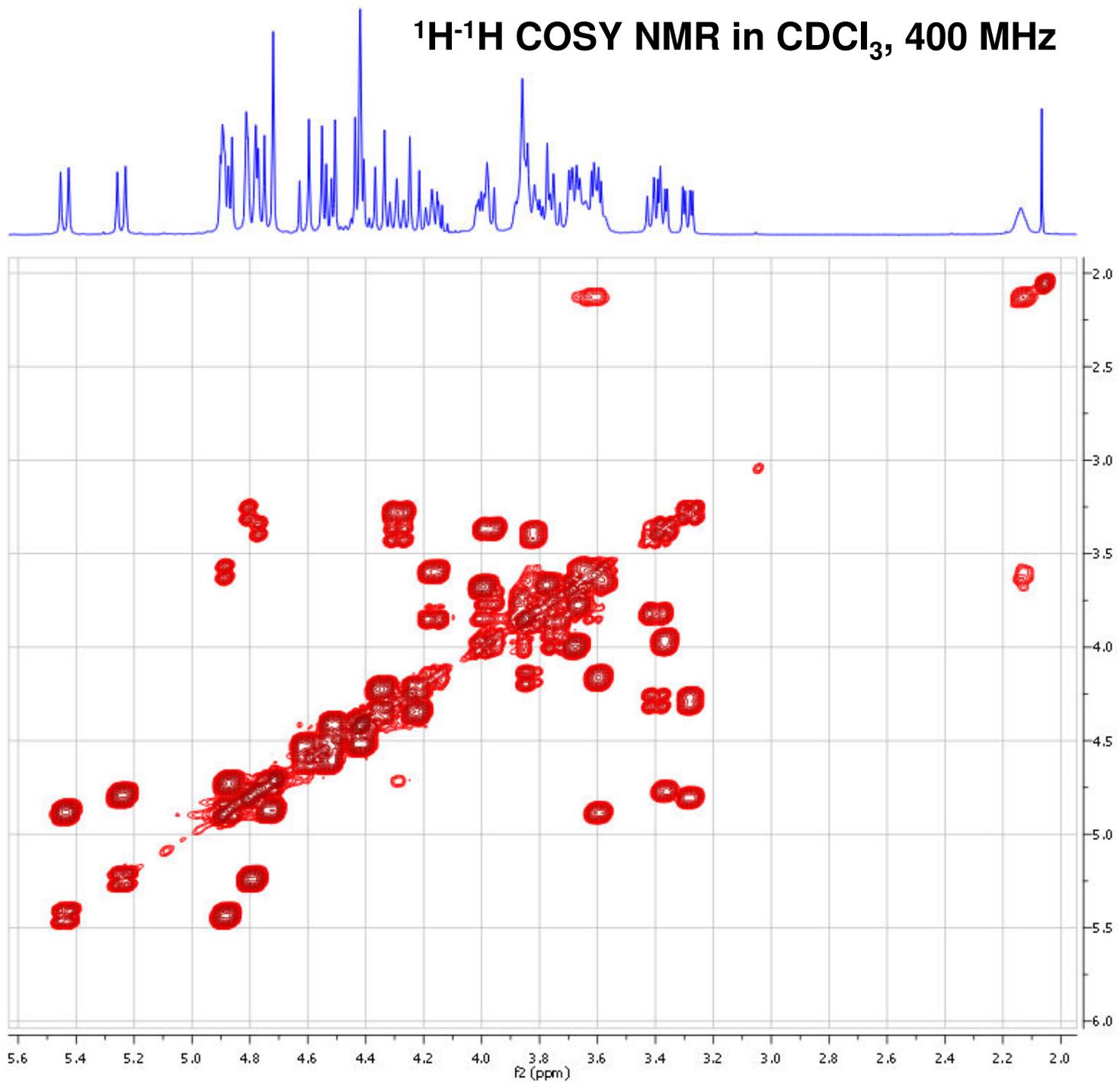
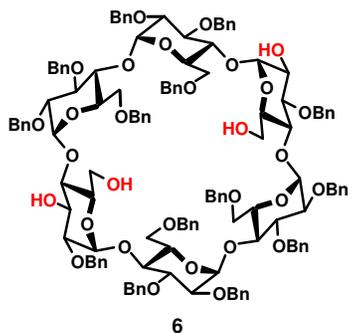


¹H NMR in CDCl₃, 400 MHz

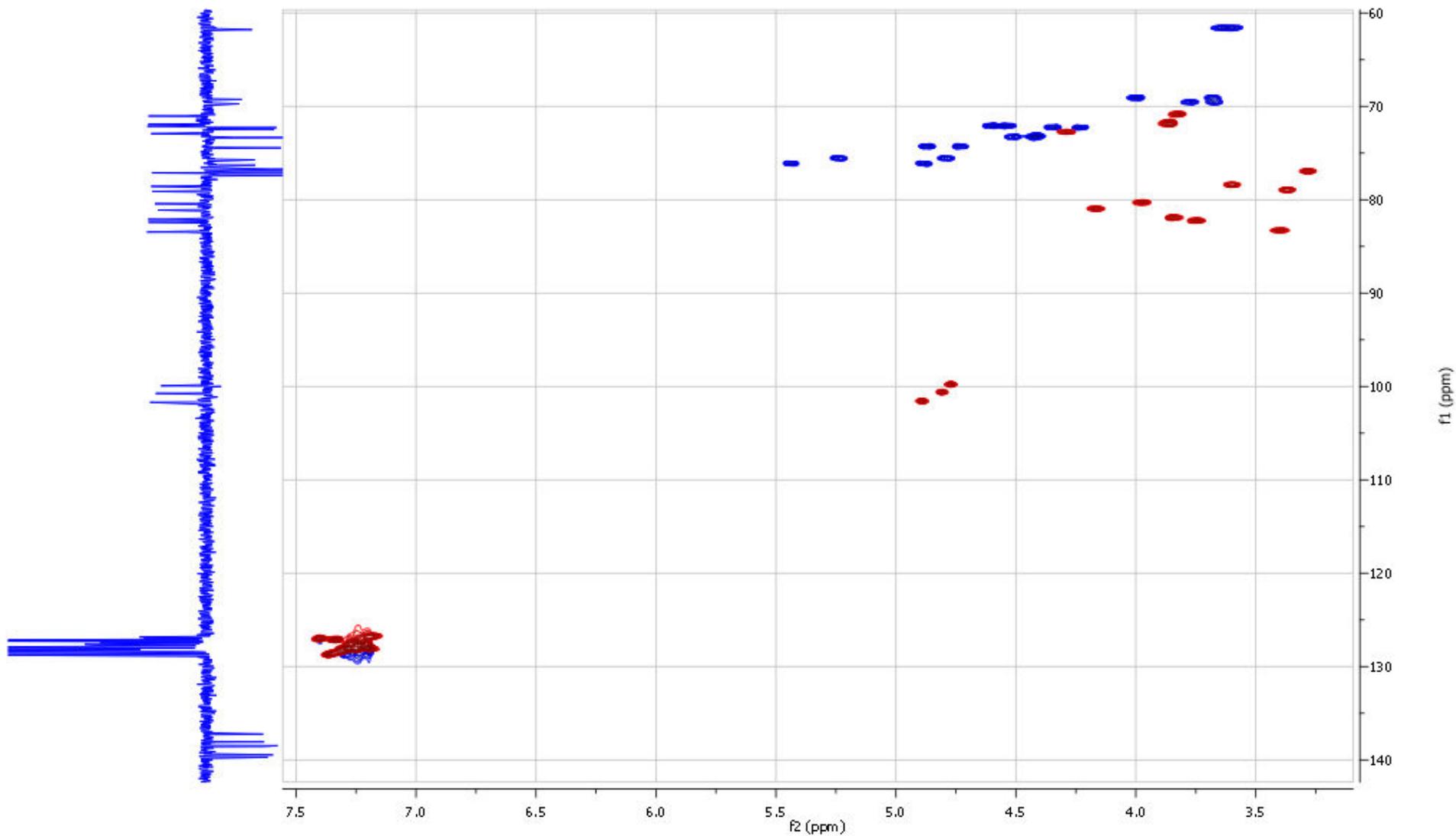
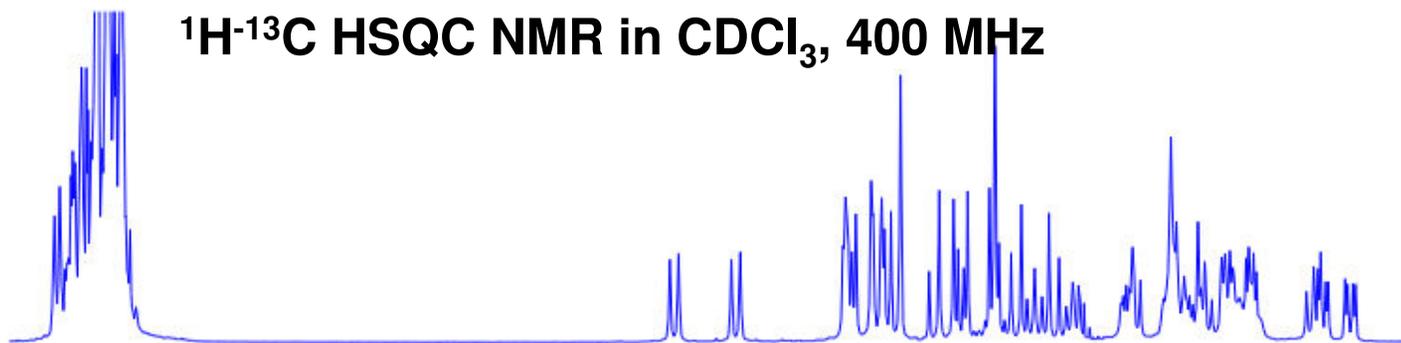
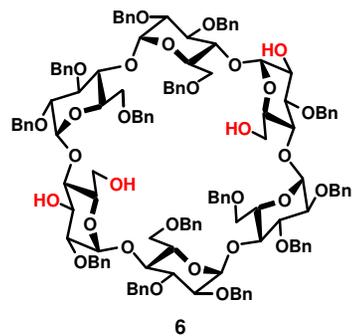




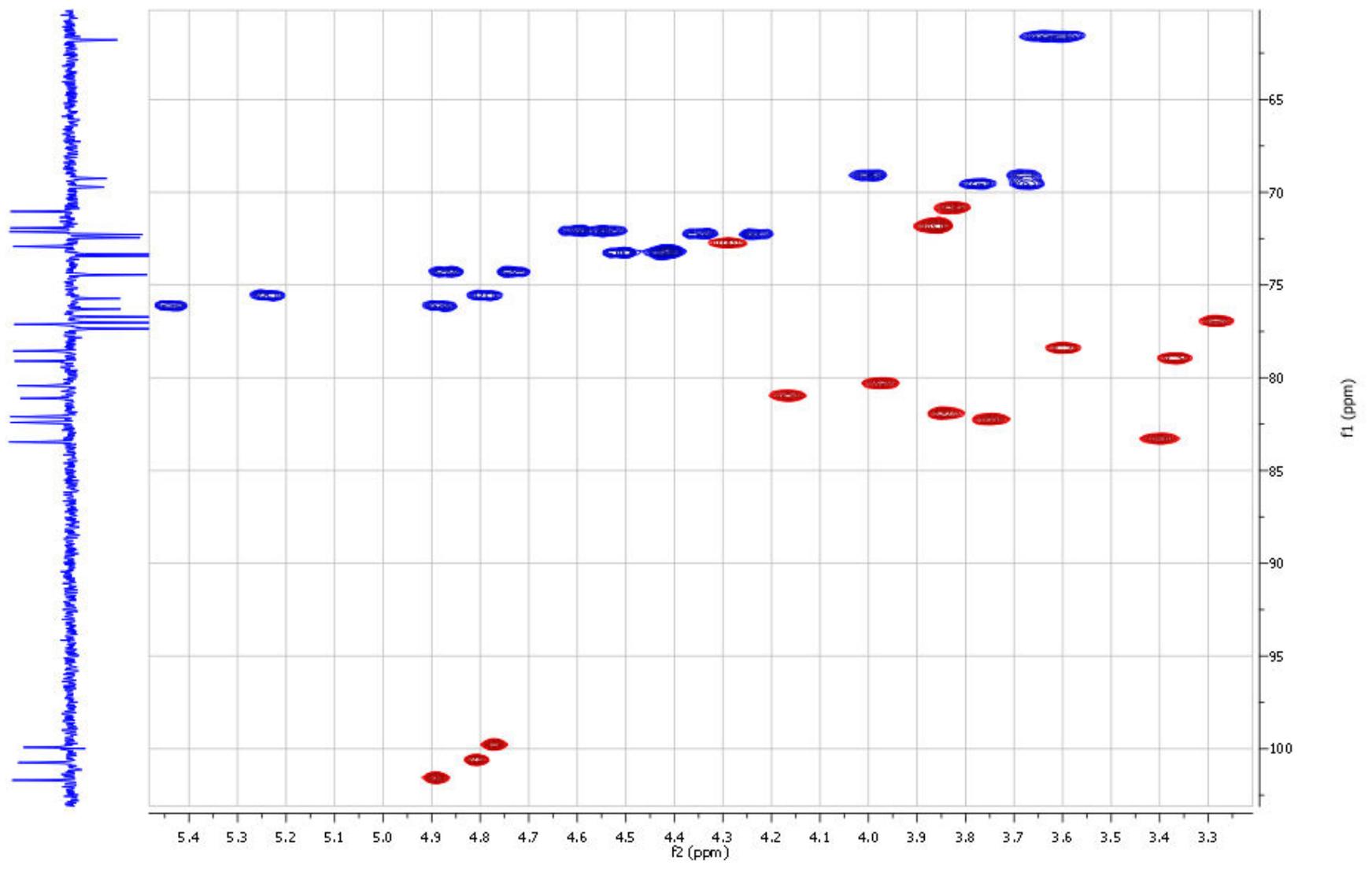
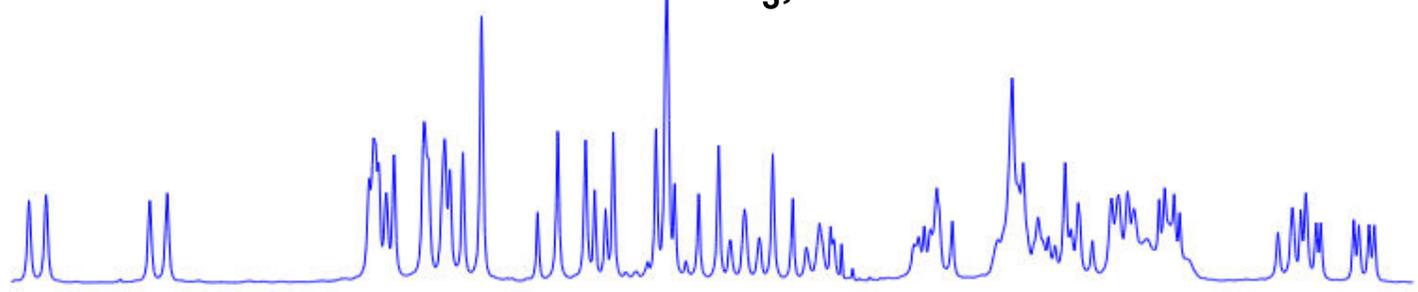
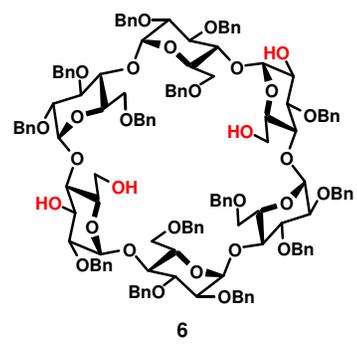
^1H - ^1H COSY NMR in CDCl_3 , 400 MHz



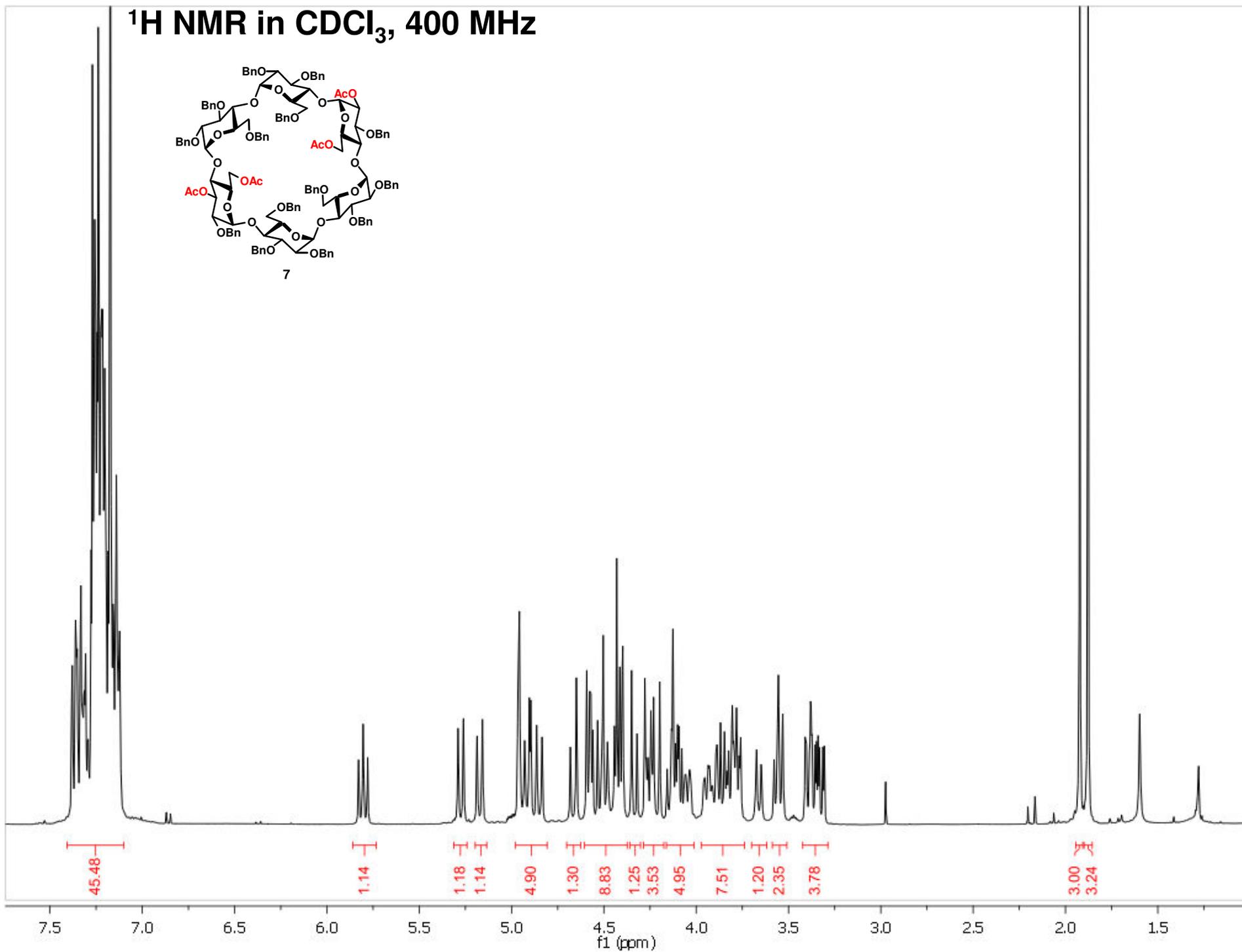
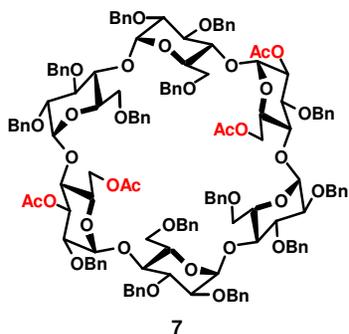
^1H - ^{13}C HSQC NMR in CDCl_3 , 400 MHz

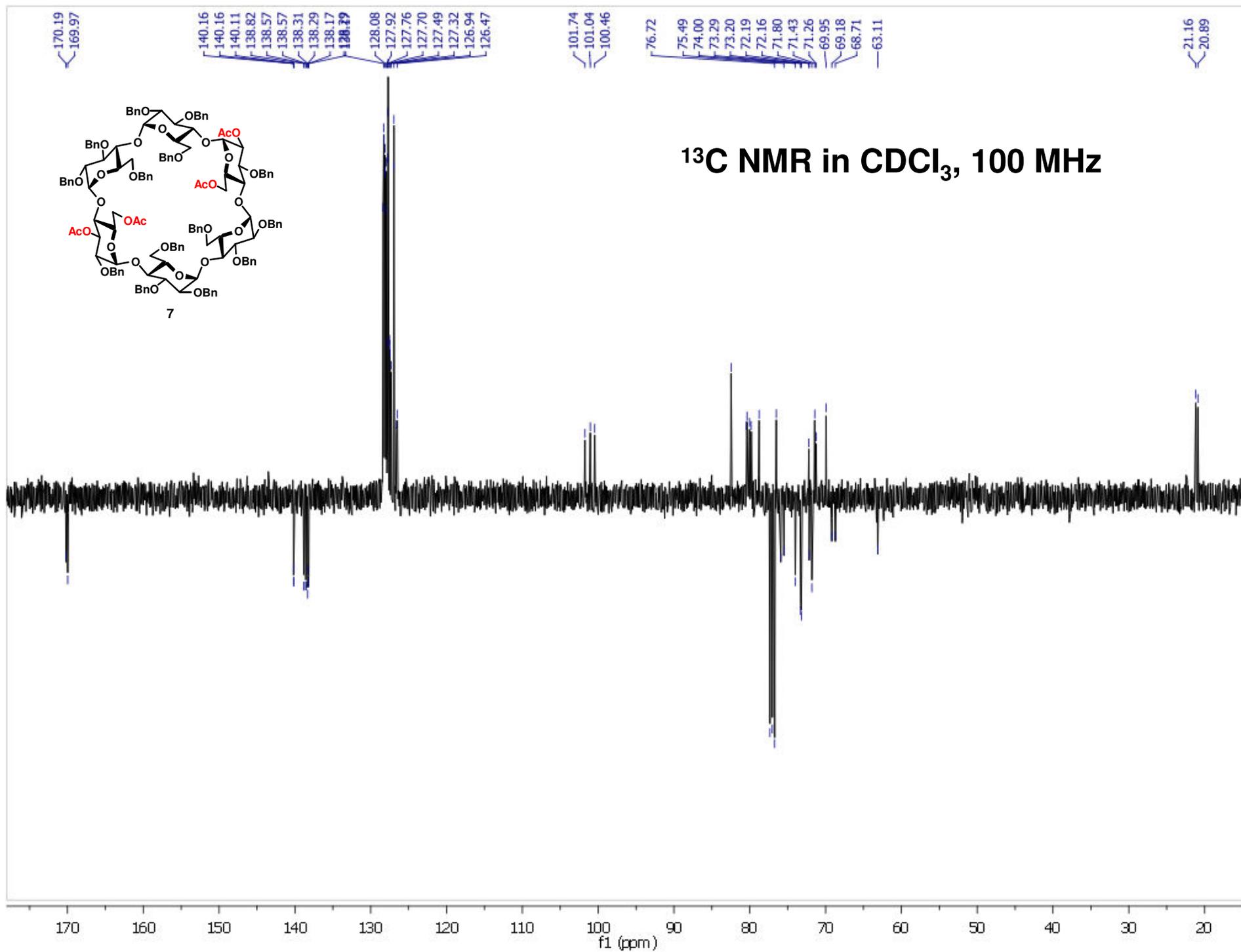


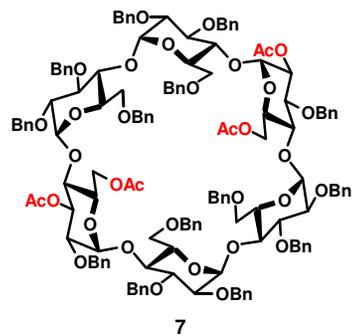
^1H - ^{13}C HSQC NMR in CDCl_3 , 400 MHz



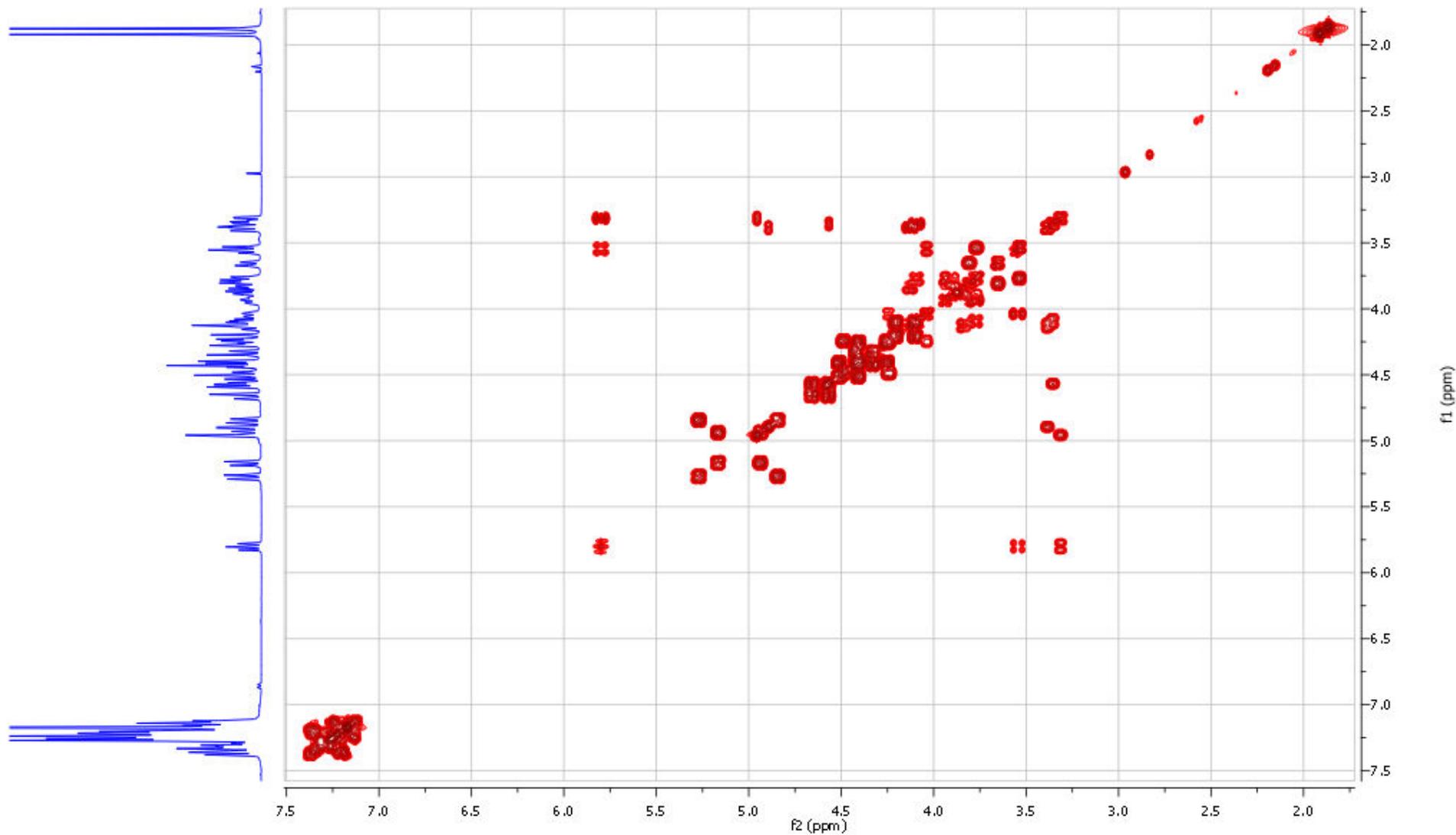
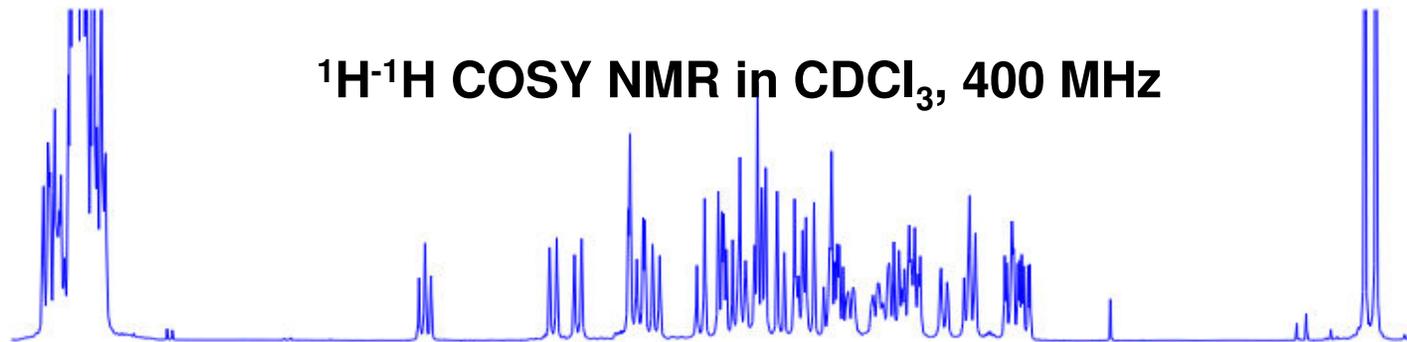
^1H NMR in CDCl_3 , 400 MHz



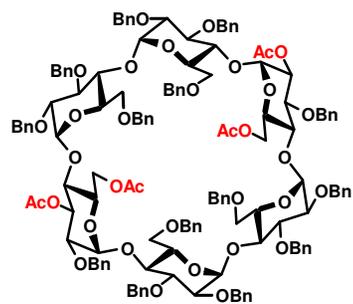




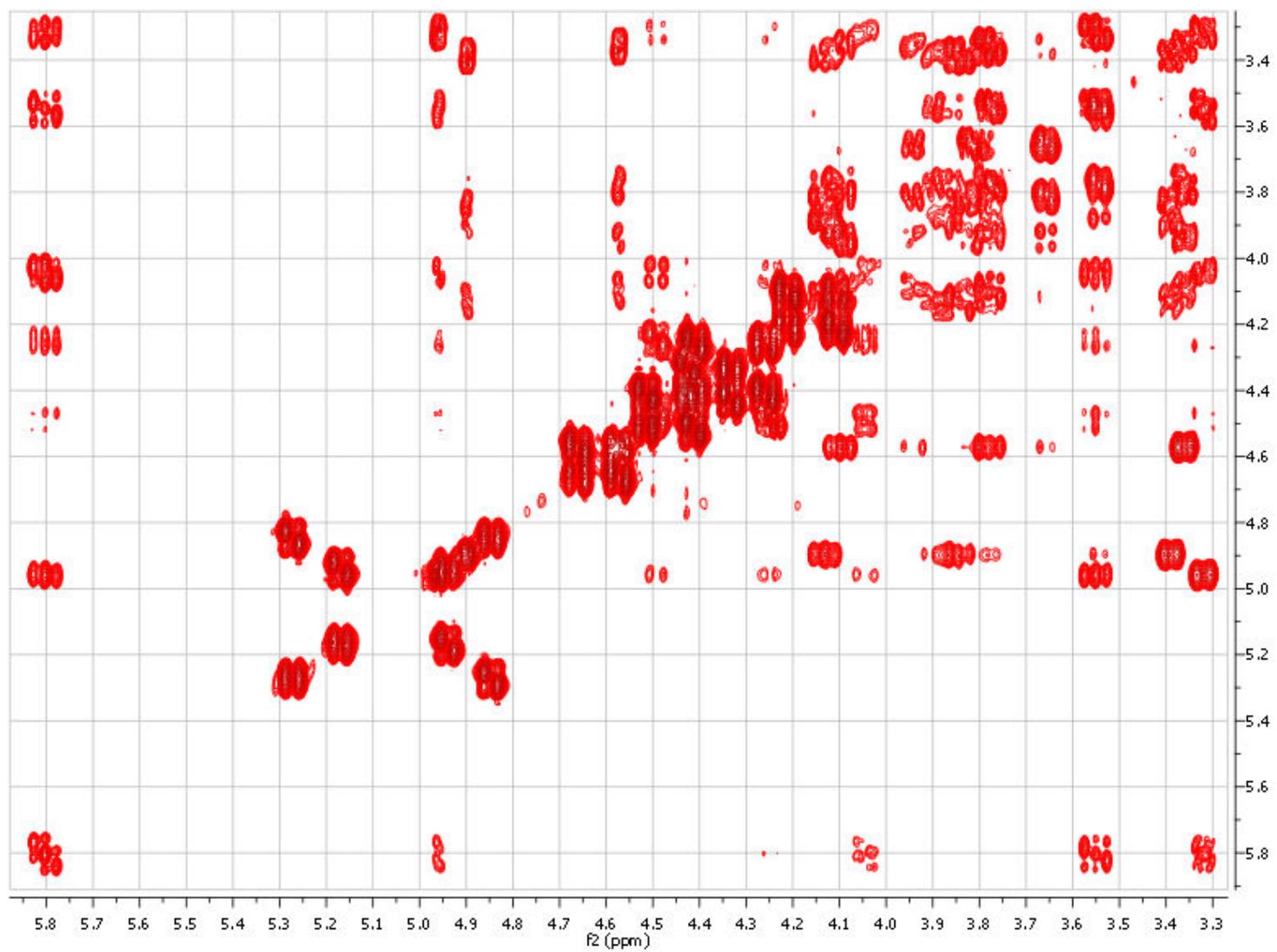
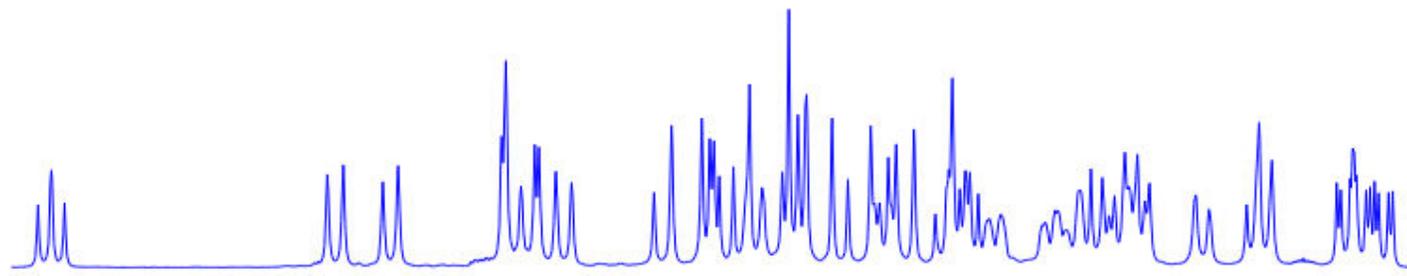
$^1\text{H}-^1\text{H}$ COSY NMR in CDCl_3 , 400 MHz



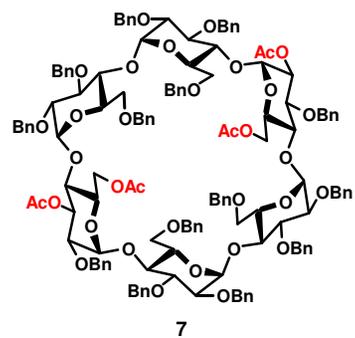
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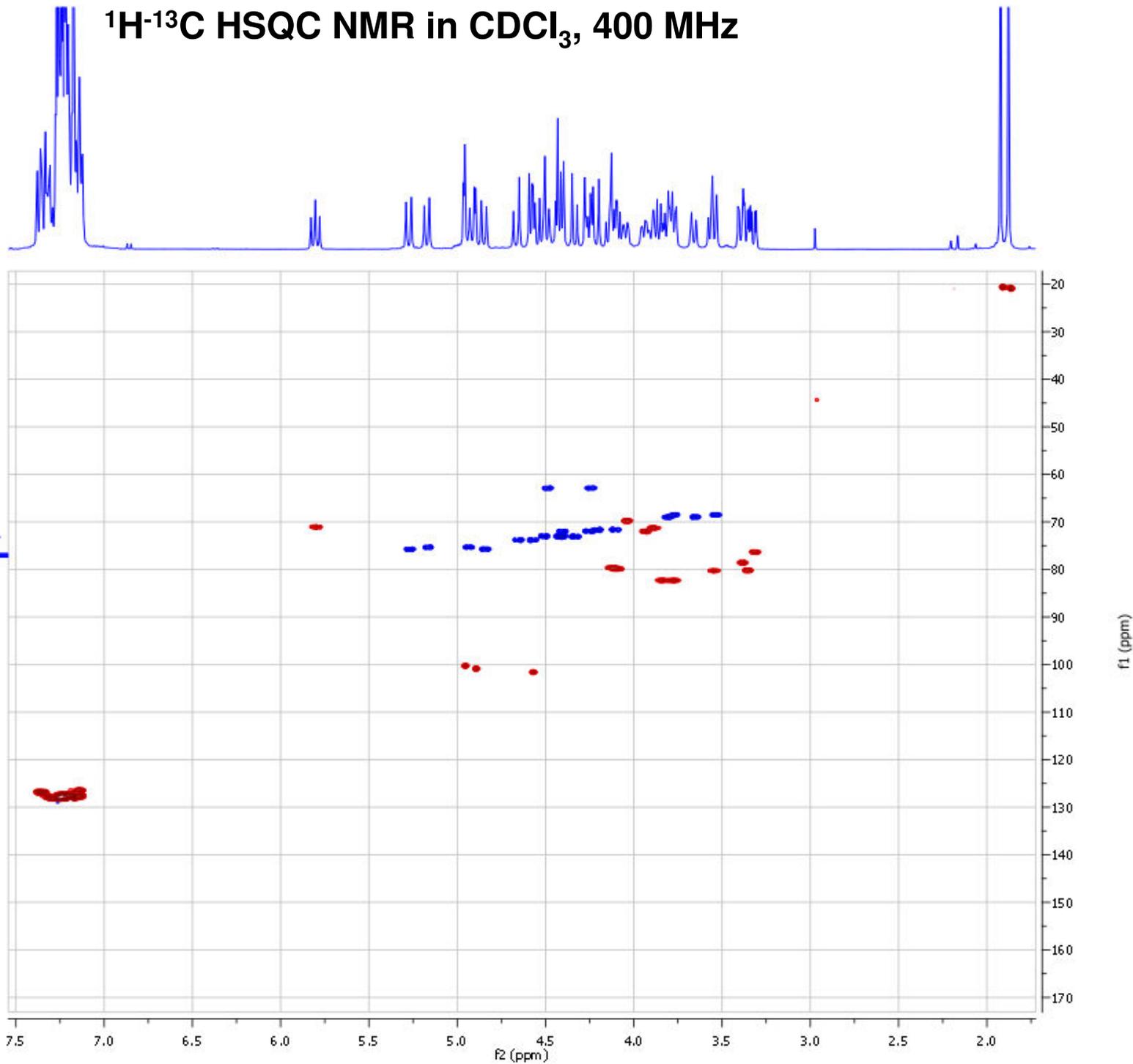
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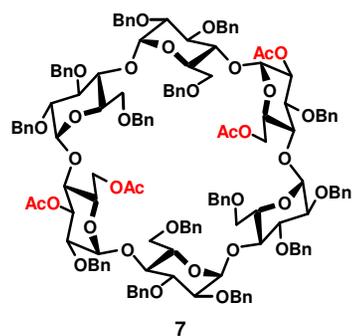
f1 (ppm)



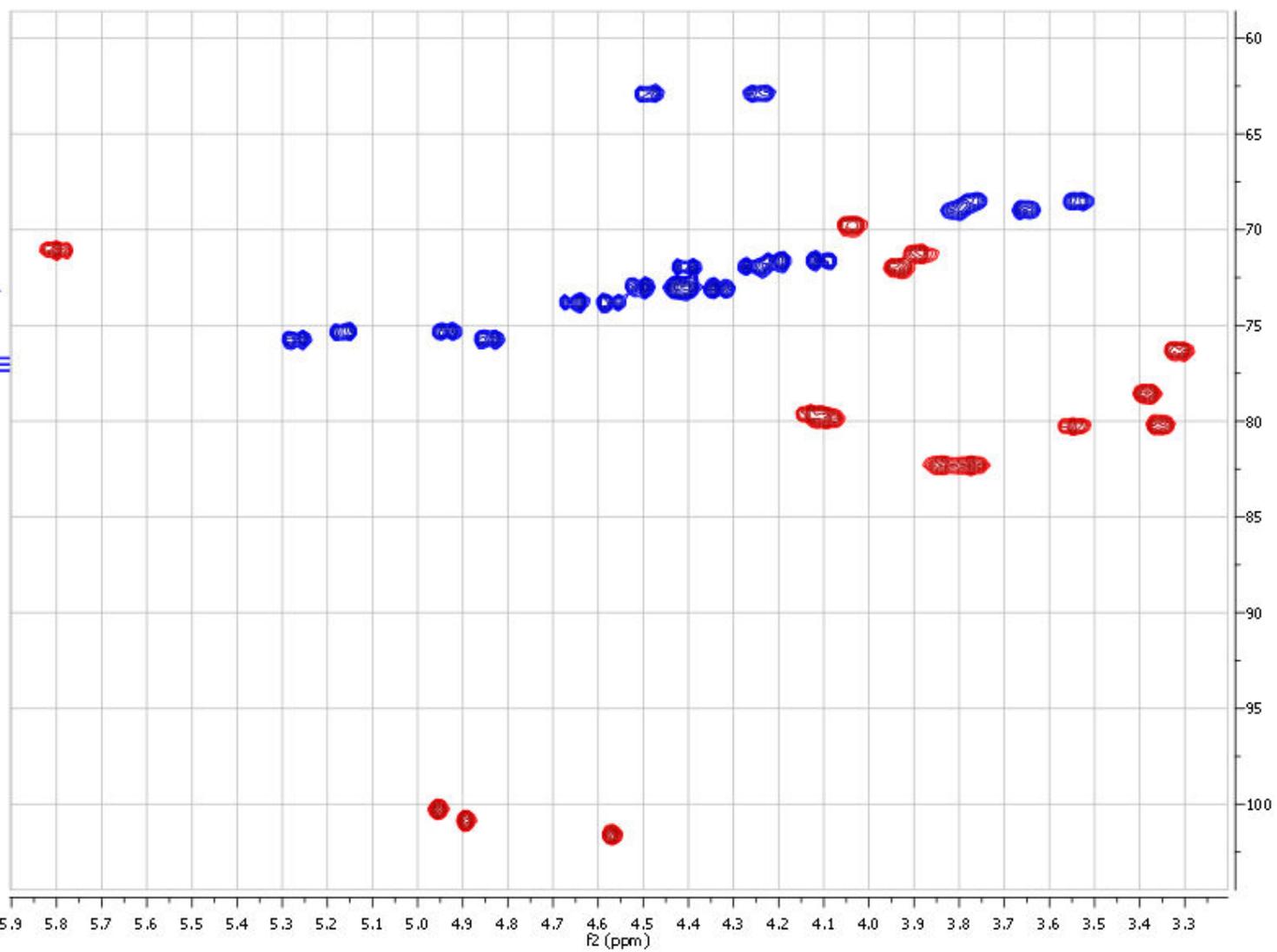
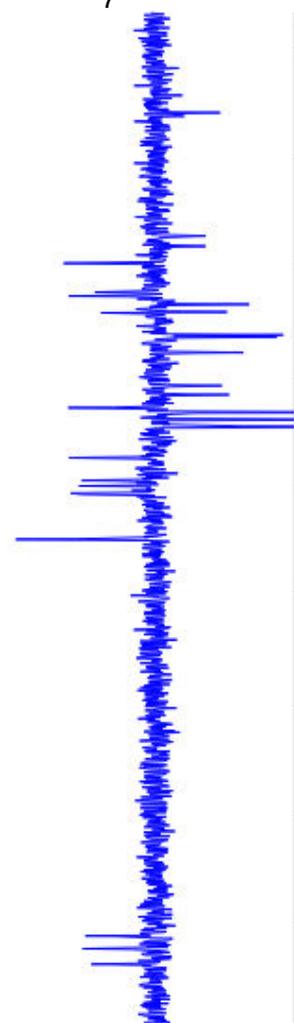
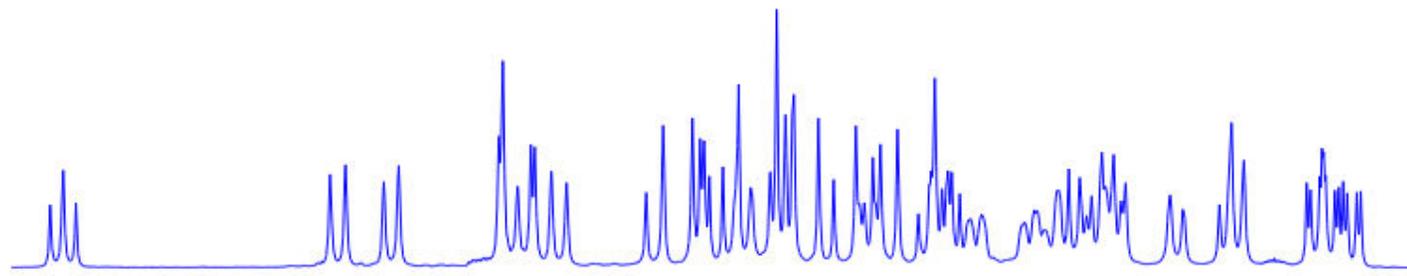
^1H - ^{13}C HSQC NMR in CDCl_3 , 400 MHz



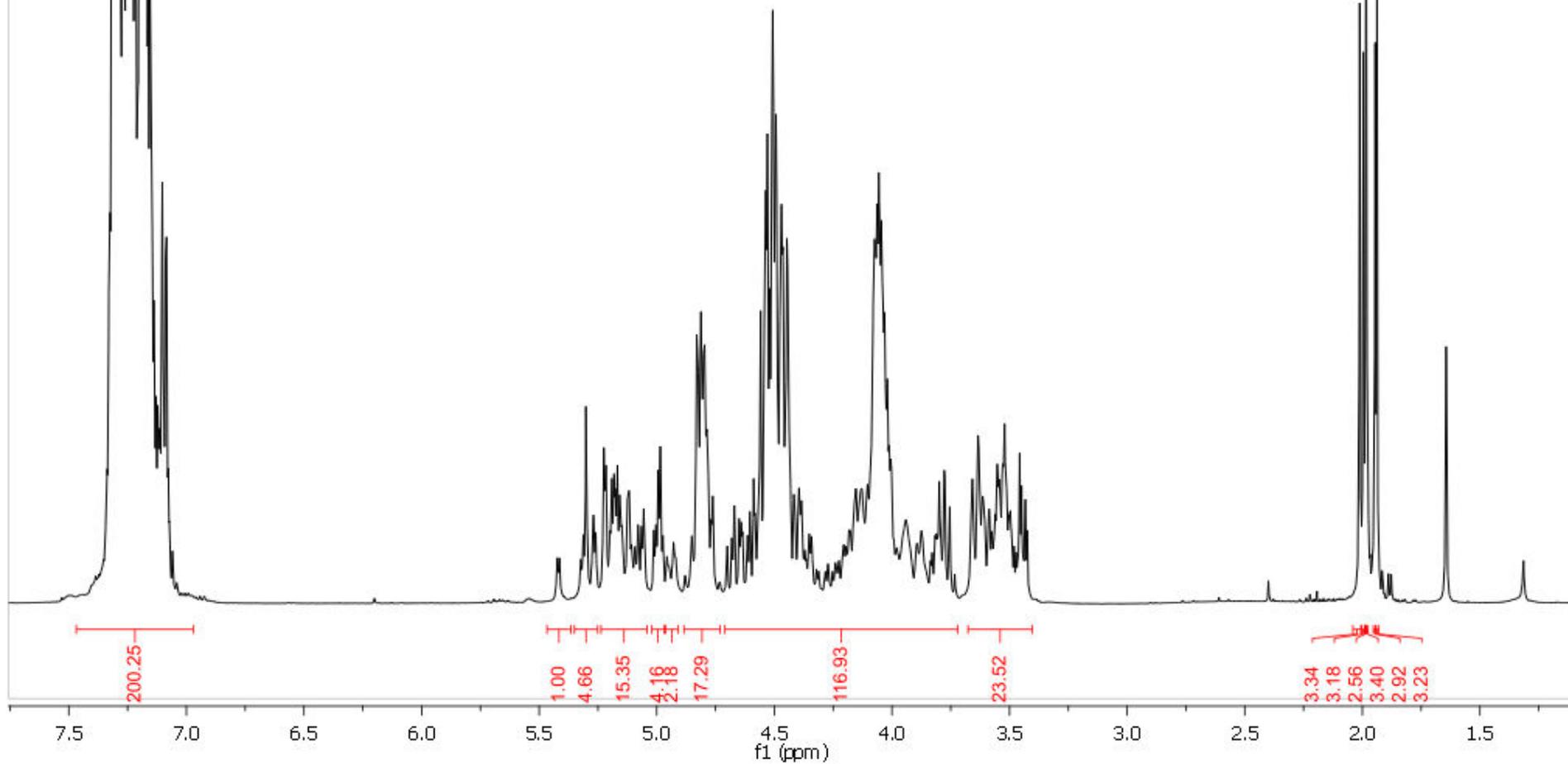
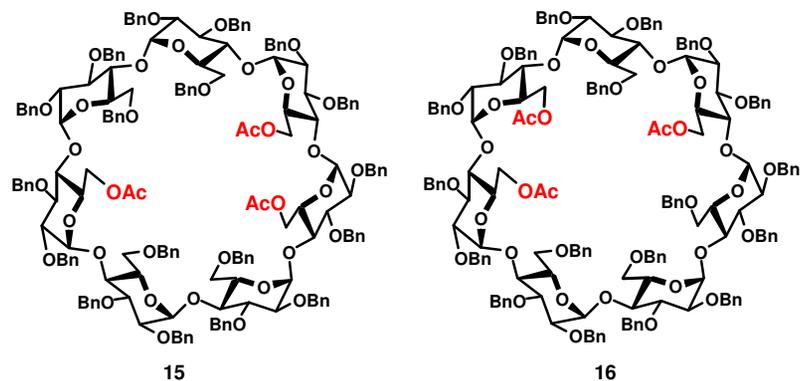
^1H - ^{13}C HSQC NMR in CDCl_3 , 400 MHz



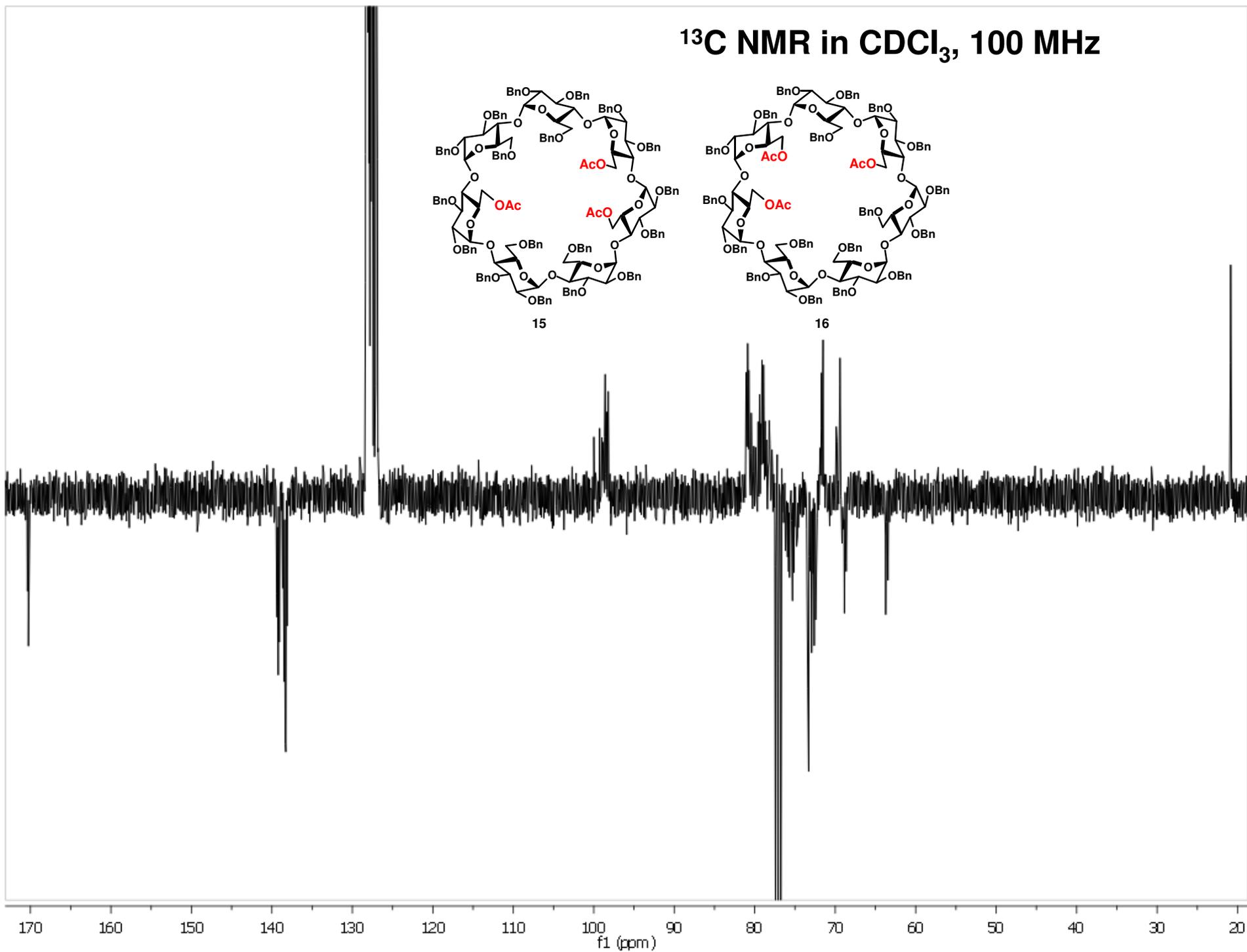
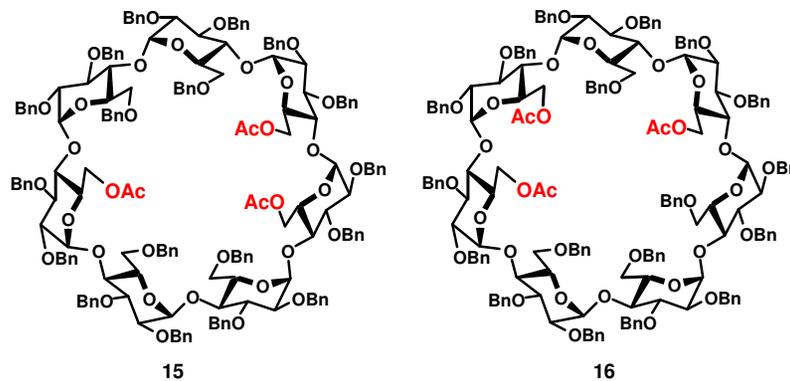
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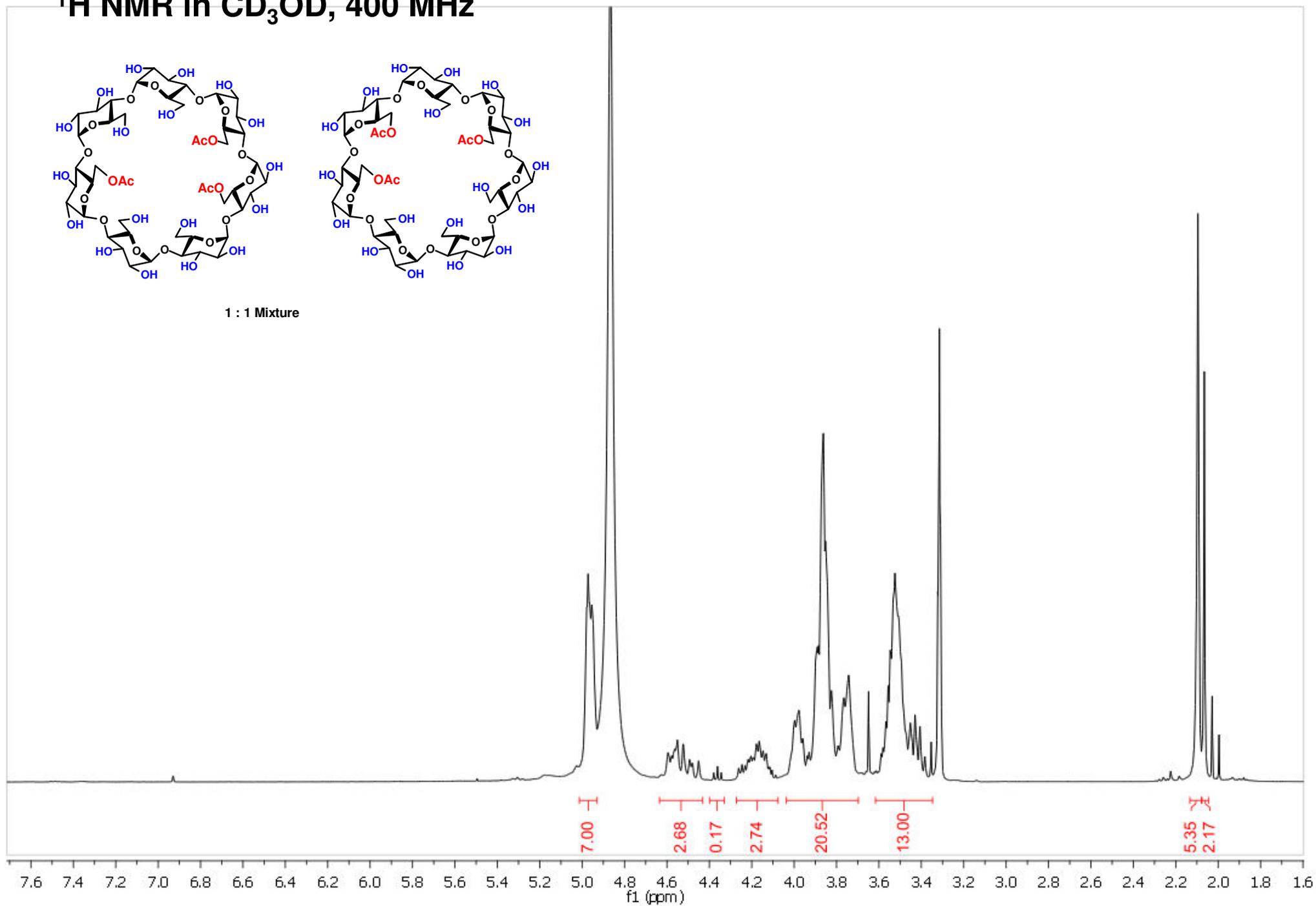
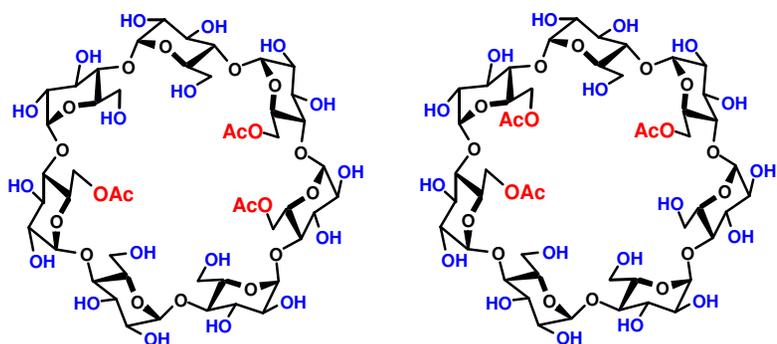
¹H NMR in CDCl₃, 400 MHz



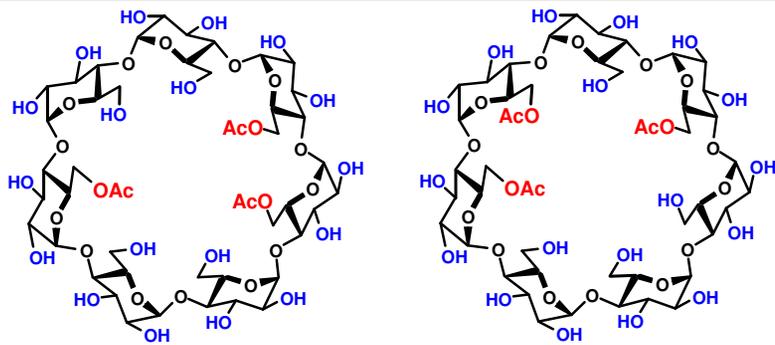
^{13}C NMR in CDCl_3 , 100 MHz



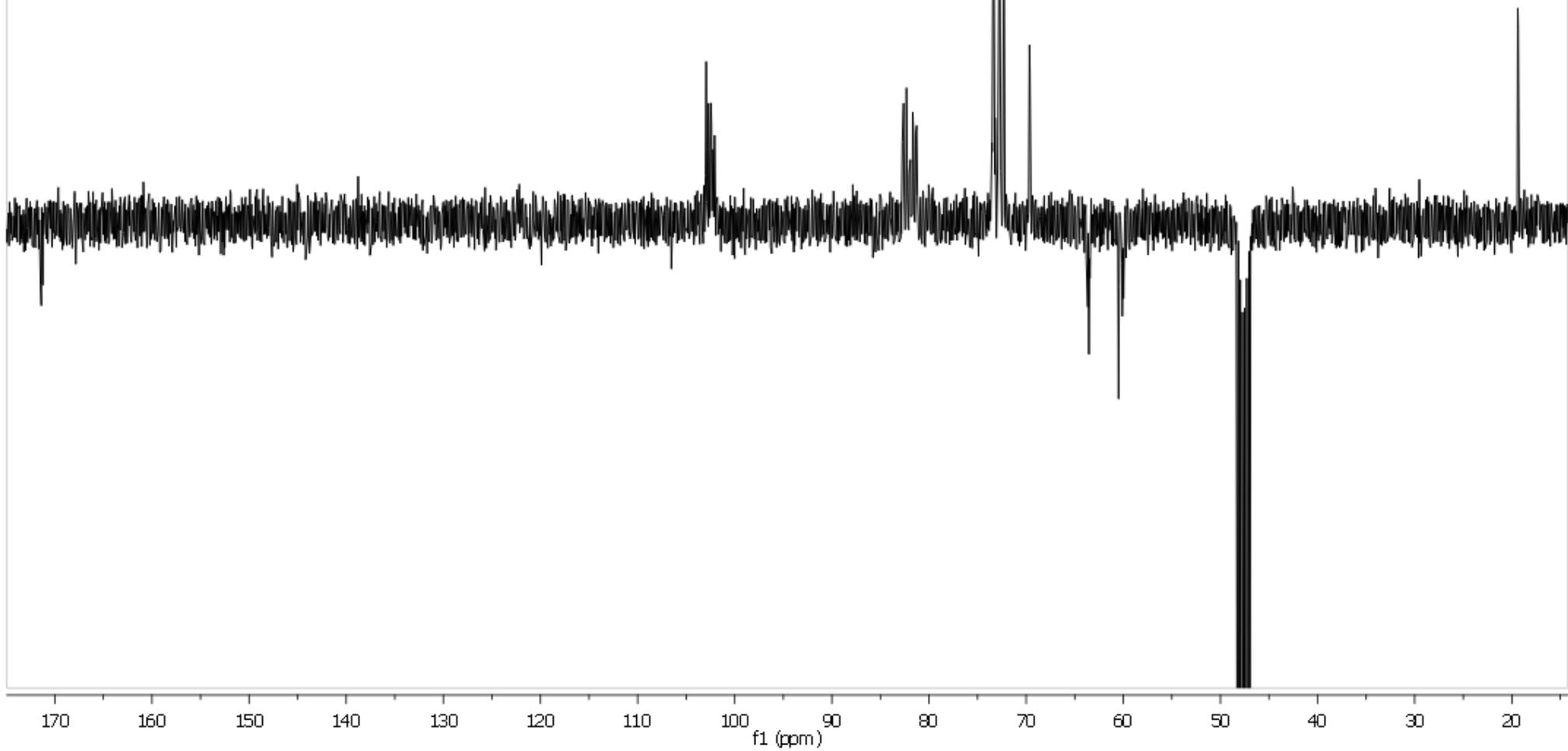
^1H NMR in CD_3OD , 400 MHz



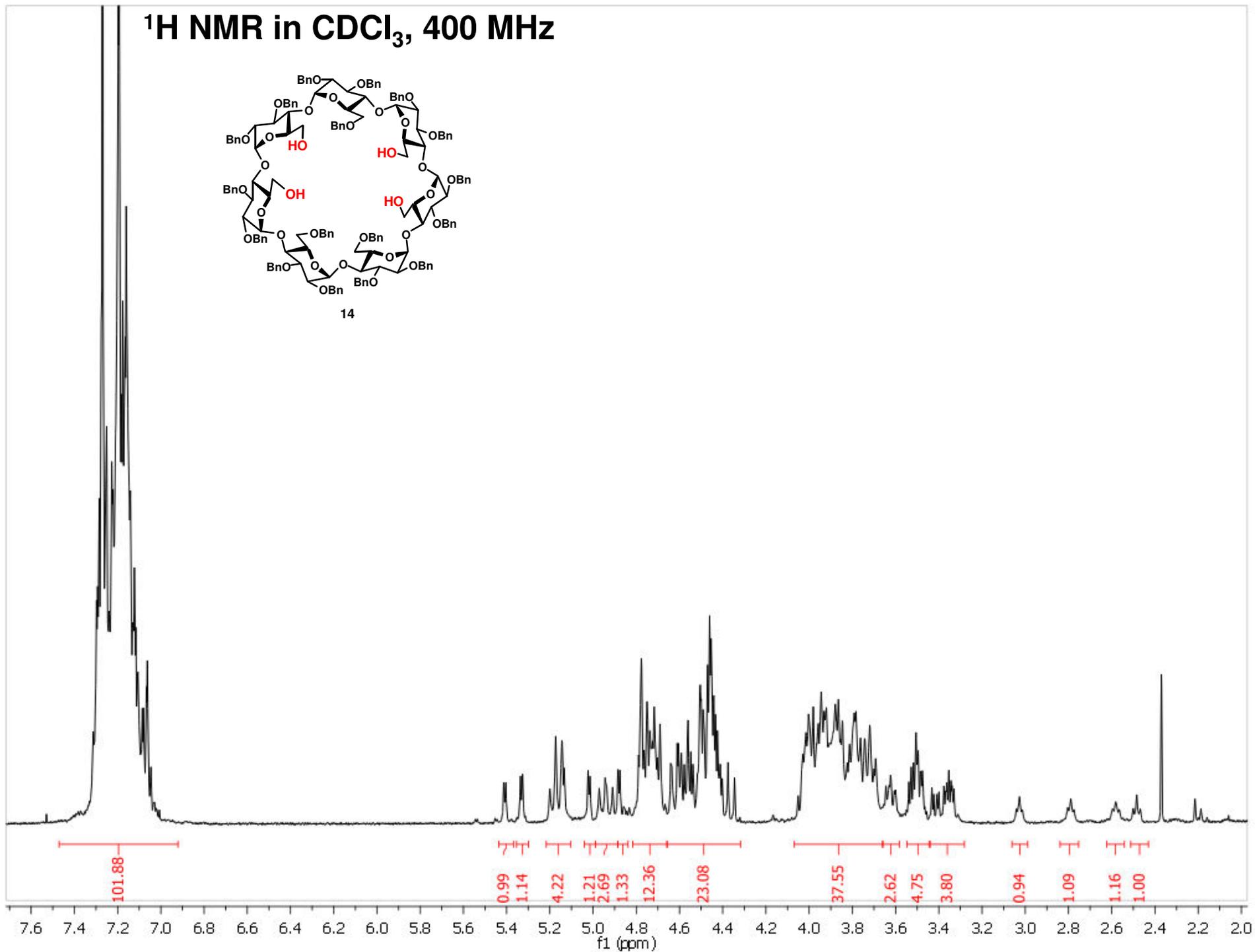
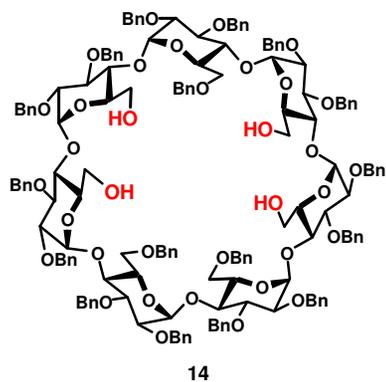
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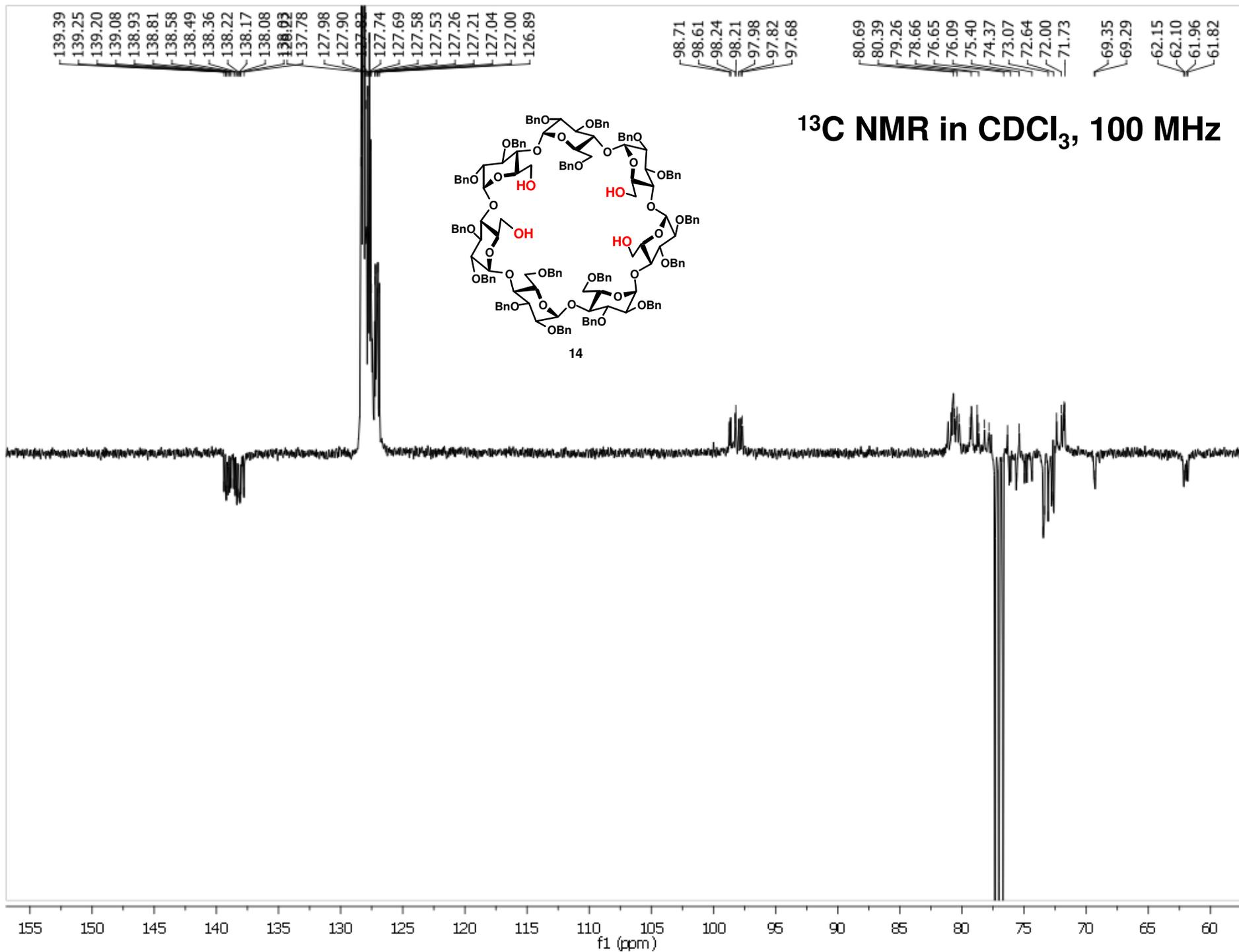


1 : 1 Mixture

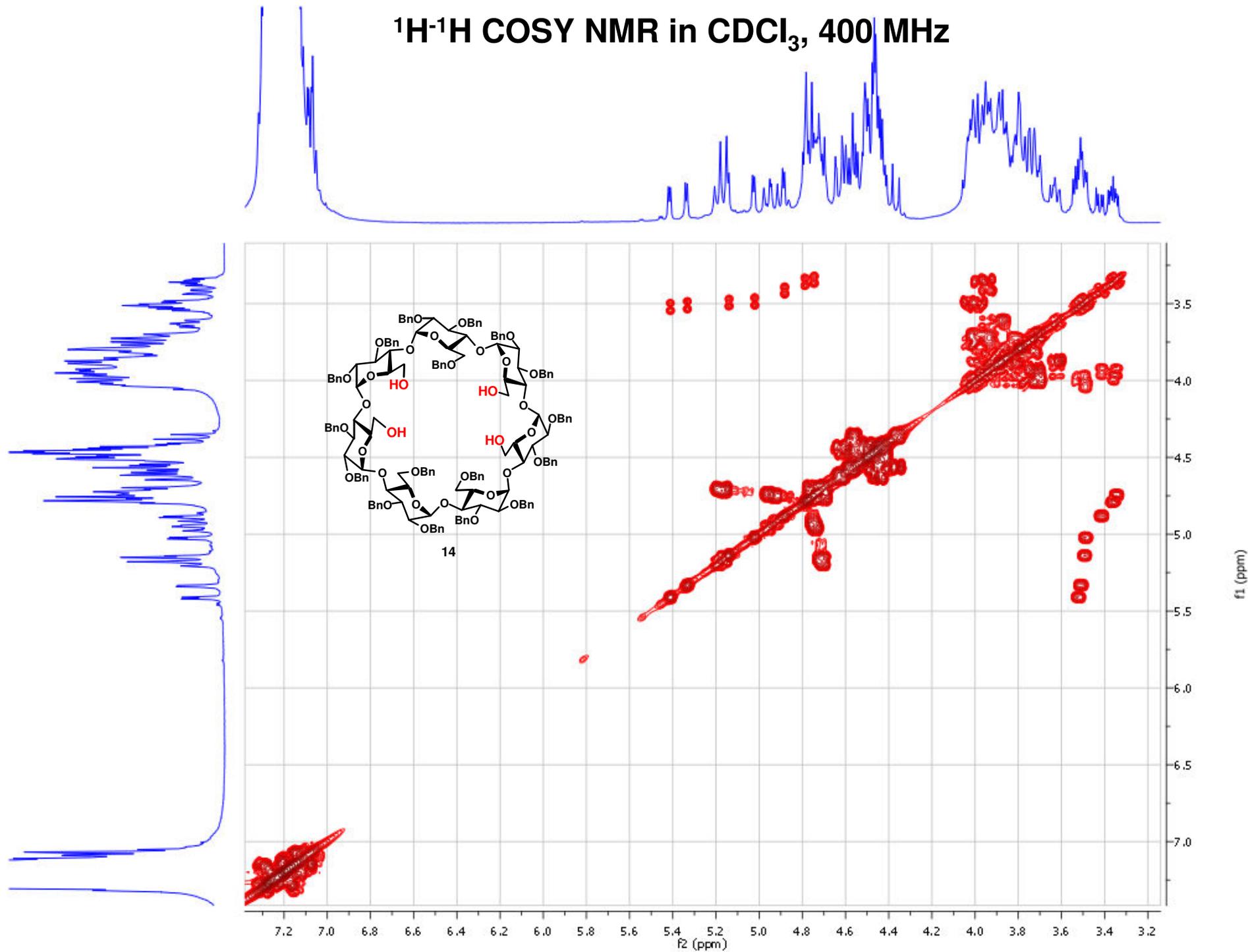


¹H NMR in CDCl₃, 400 MHz

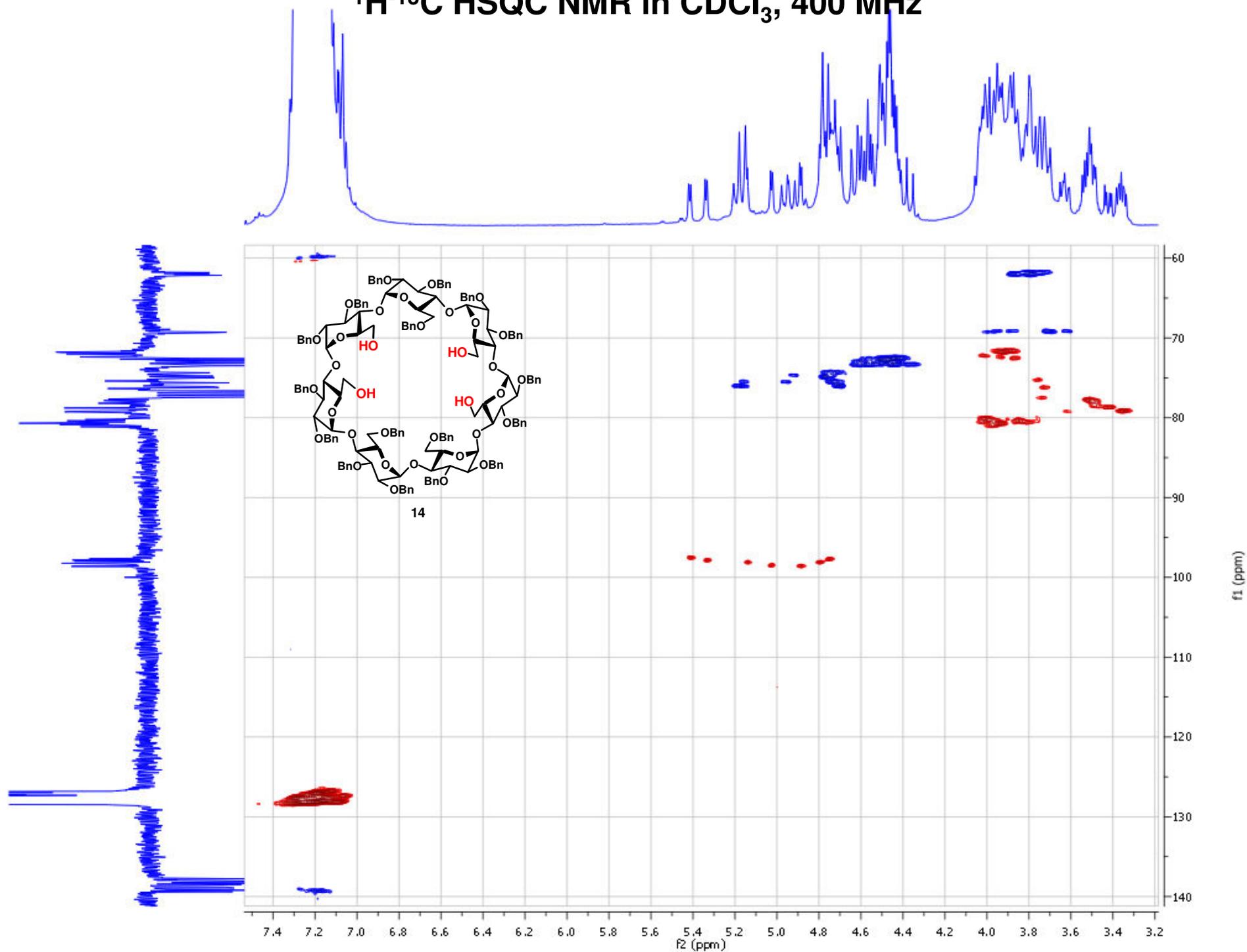




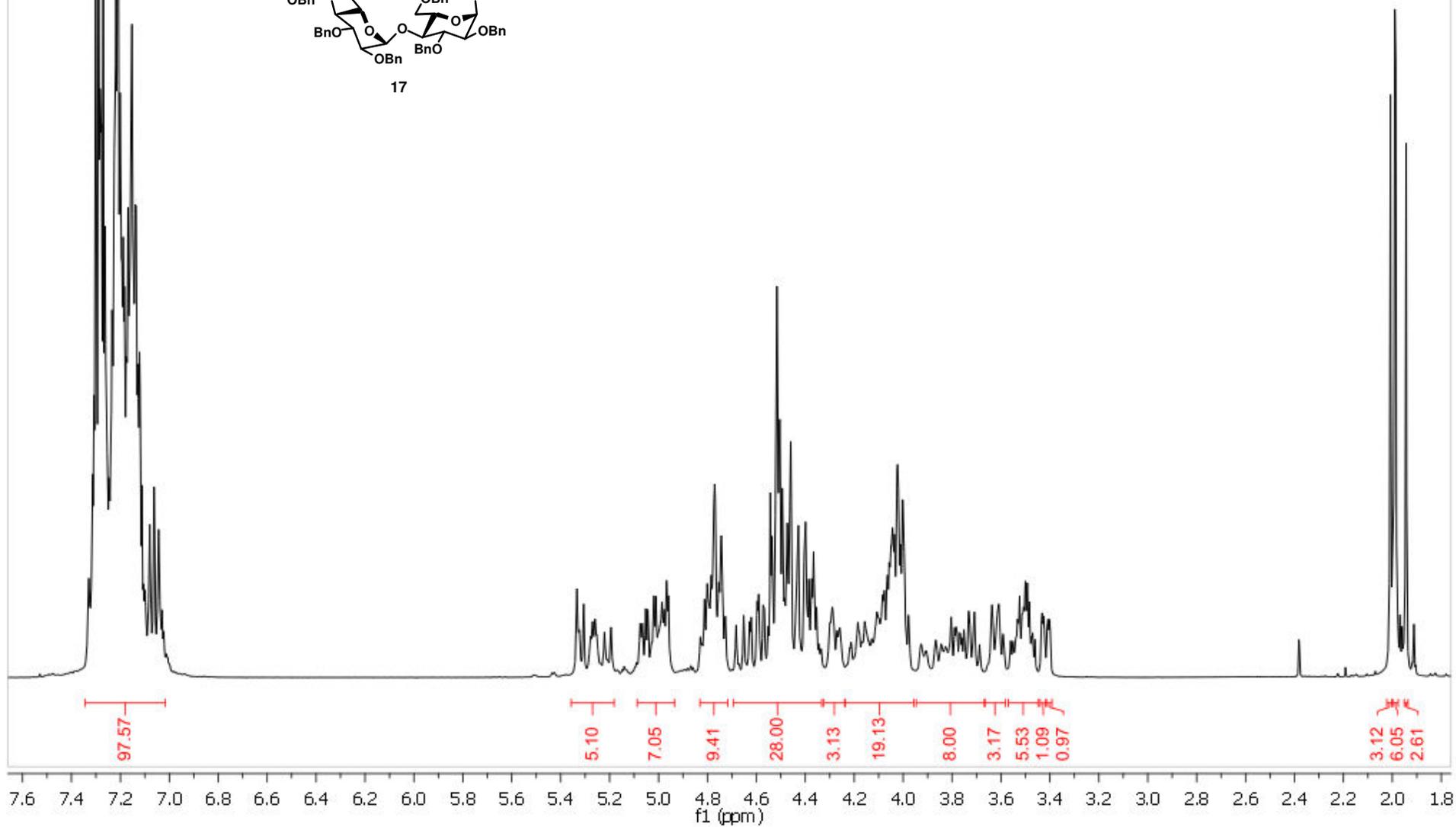
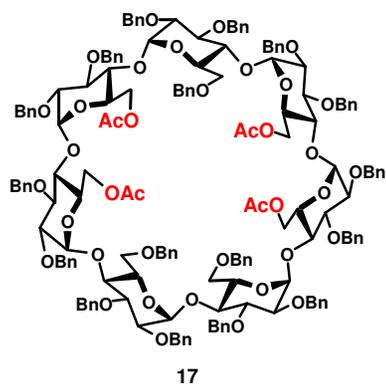
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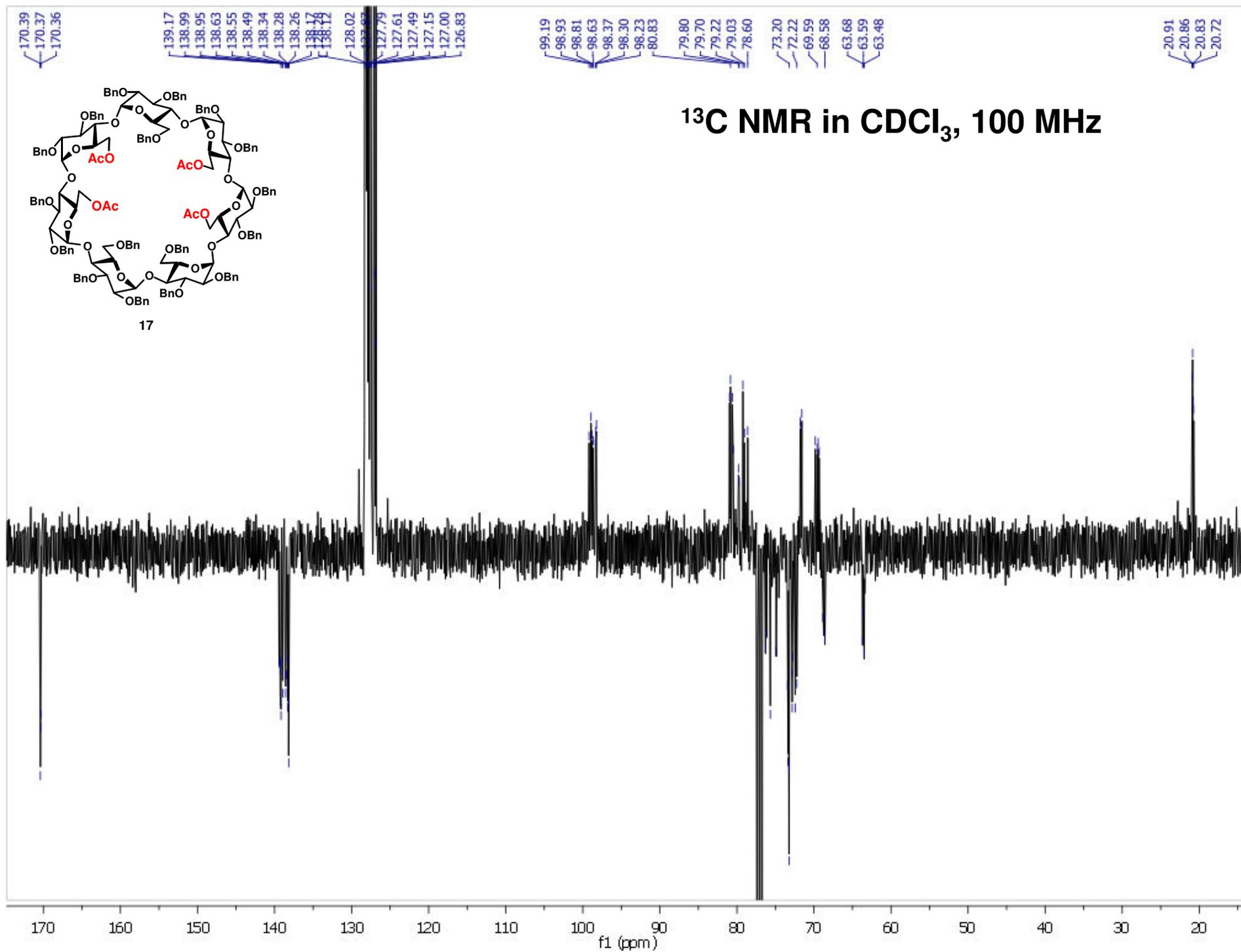


^1H - ^{13}C HSQC NMR in CDCl_3 , 400 MHz

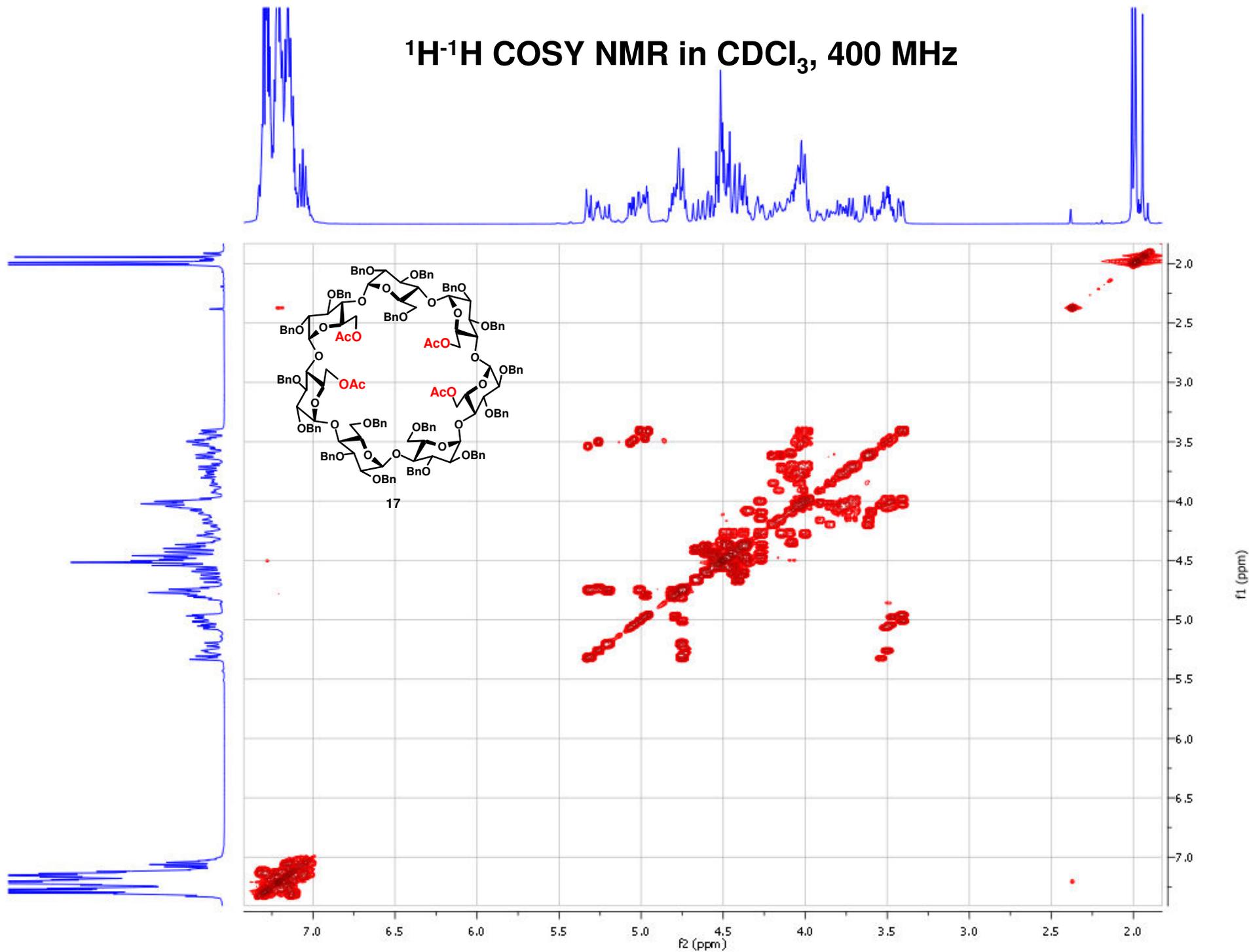


^1H NMR in CDCl_3 , 400 MHz

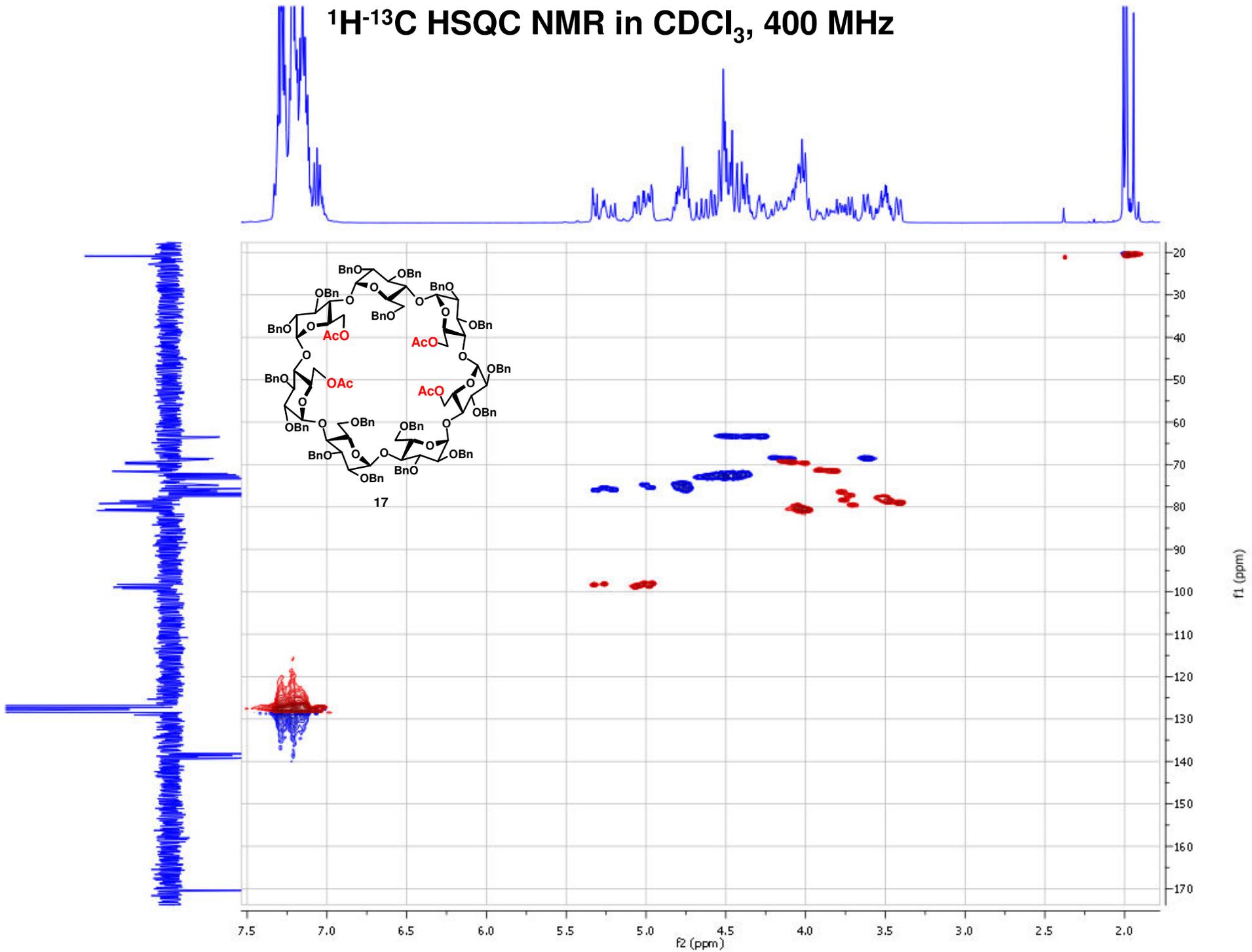




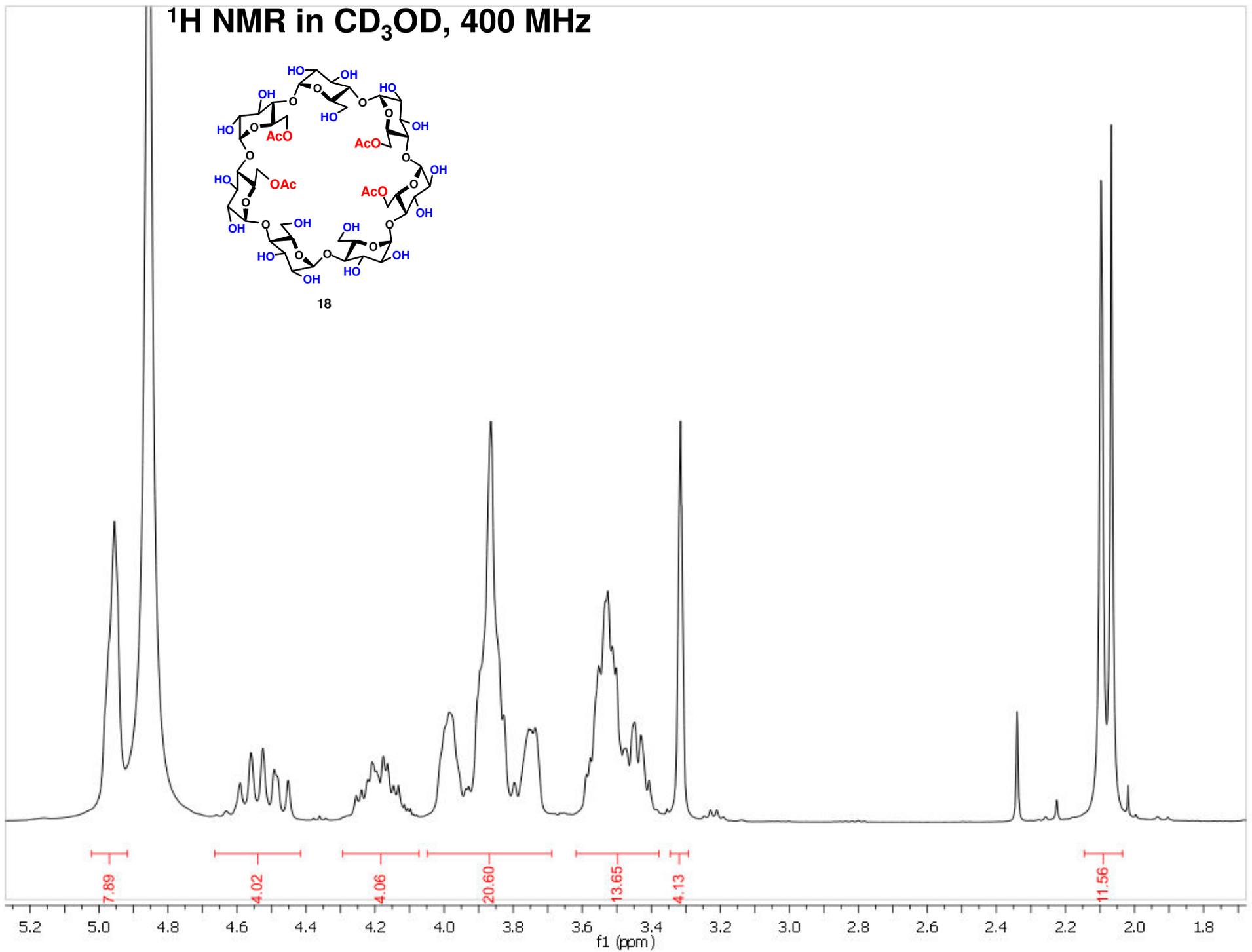
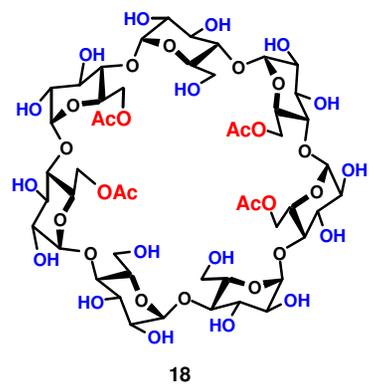
^1H - ^1H COSY NMR in CDCl_3 , 400 MHz

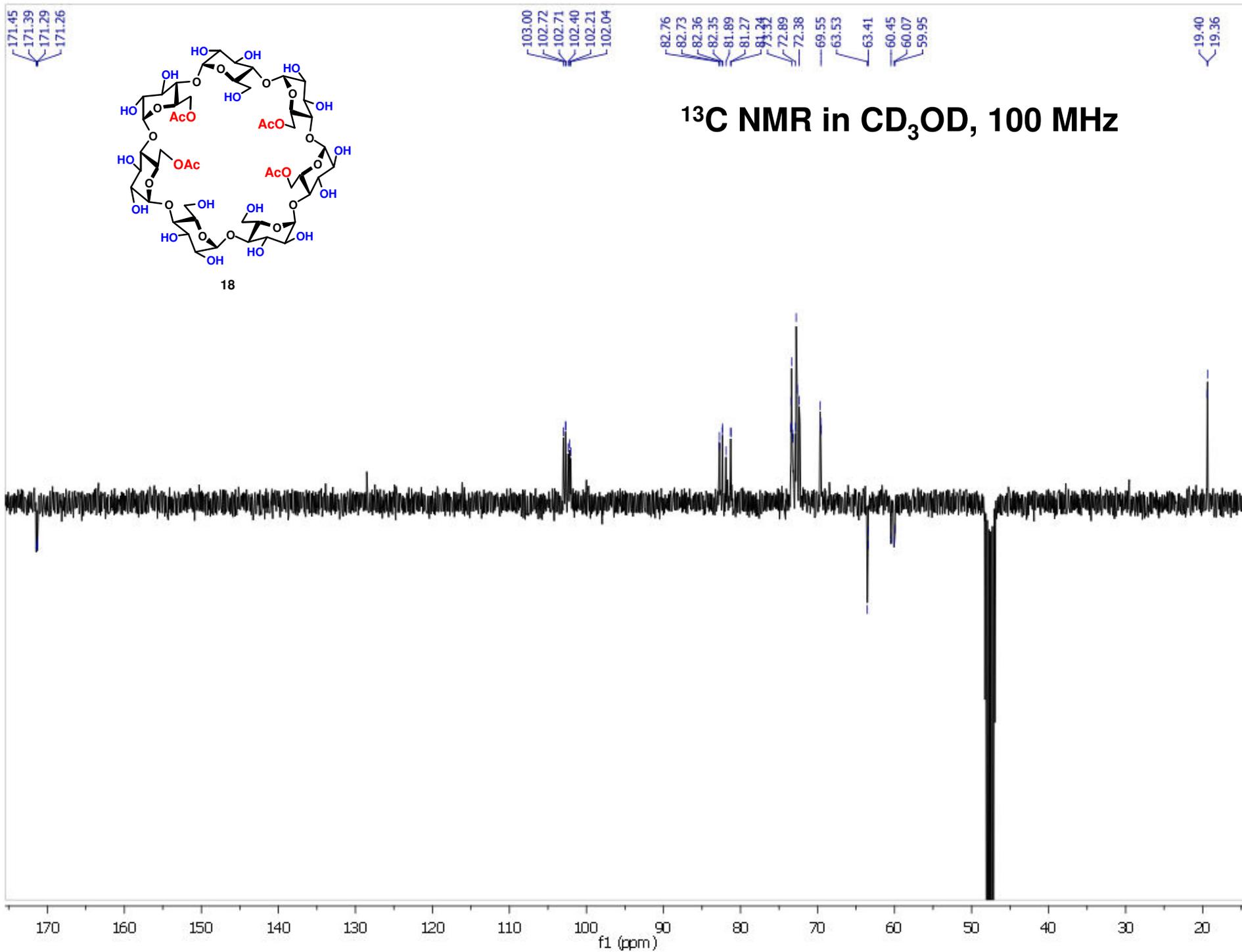


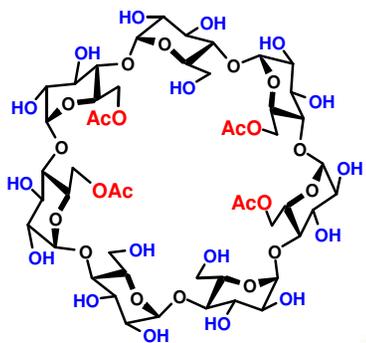
^1H - ^{13}C HSQC NMR in CDCl_3 , 400 MHz



¹H NMR in CD₃OD, 400 MHz

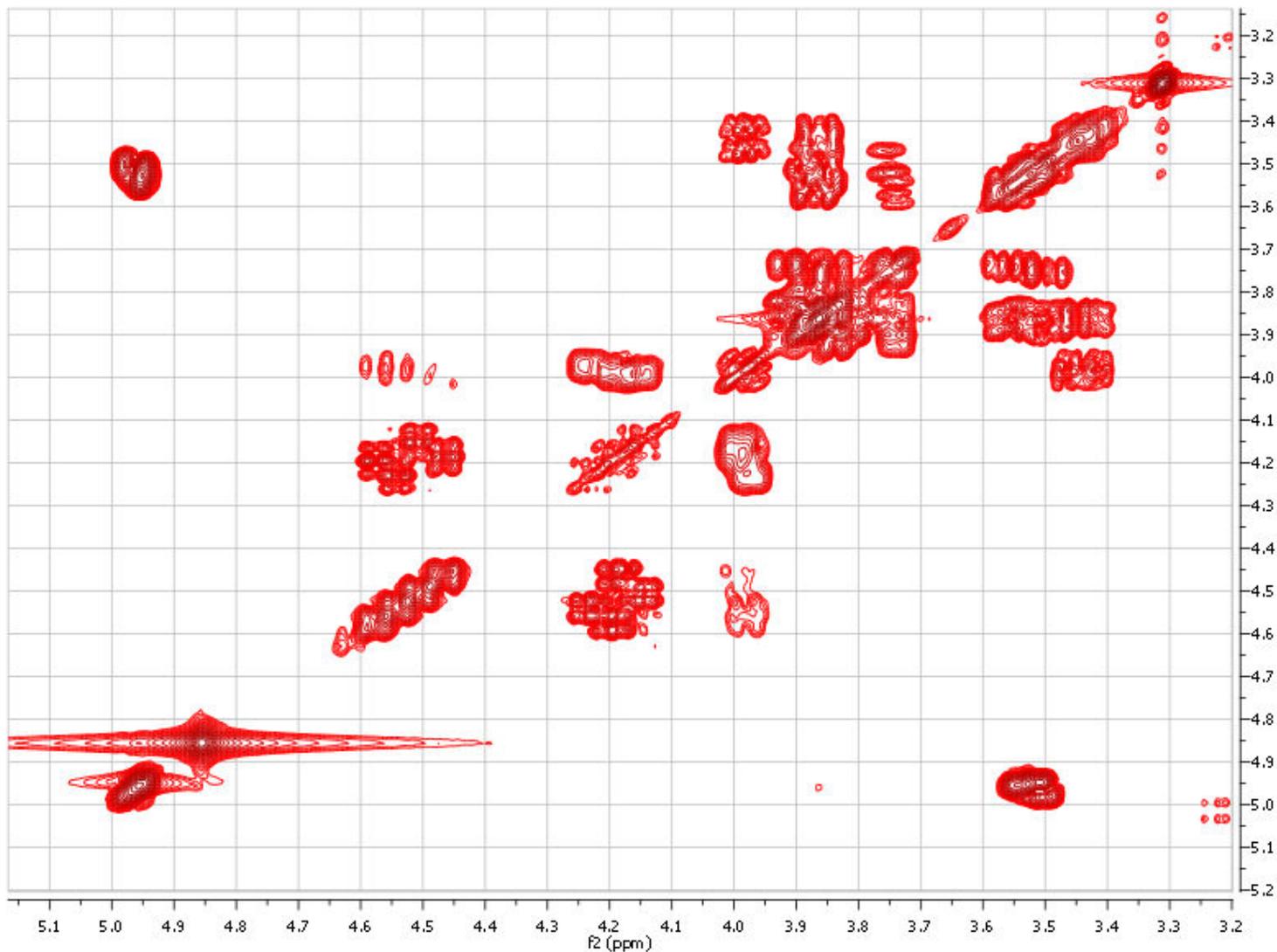
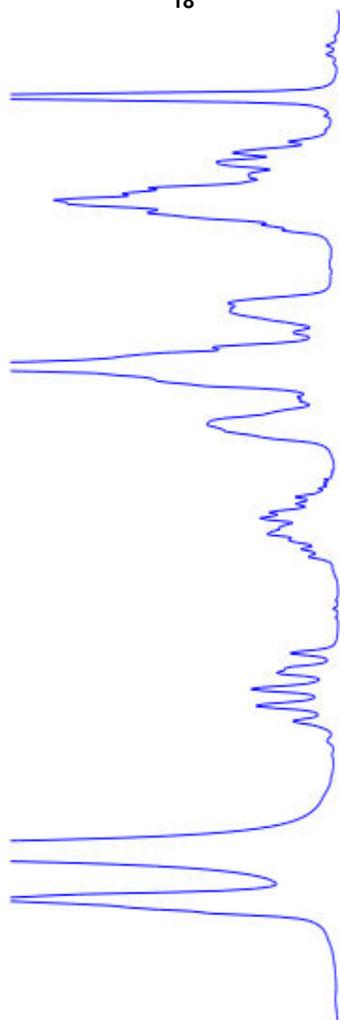
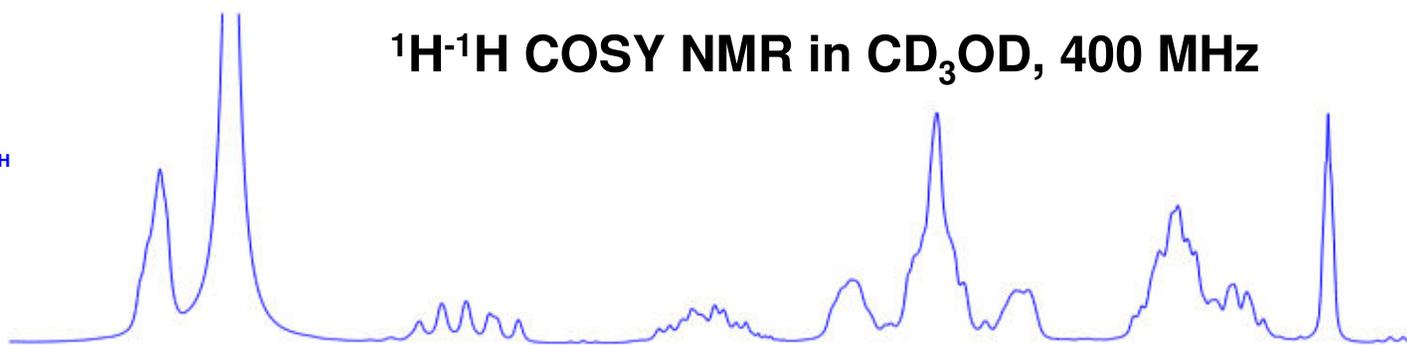






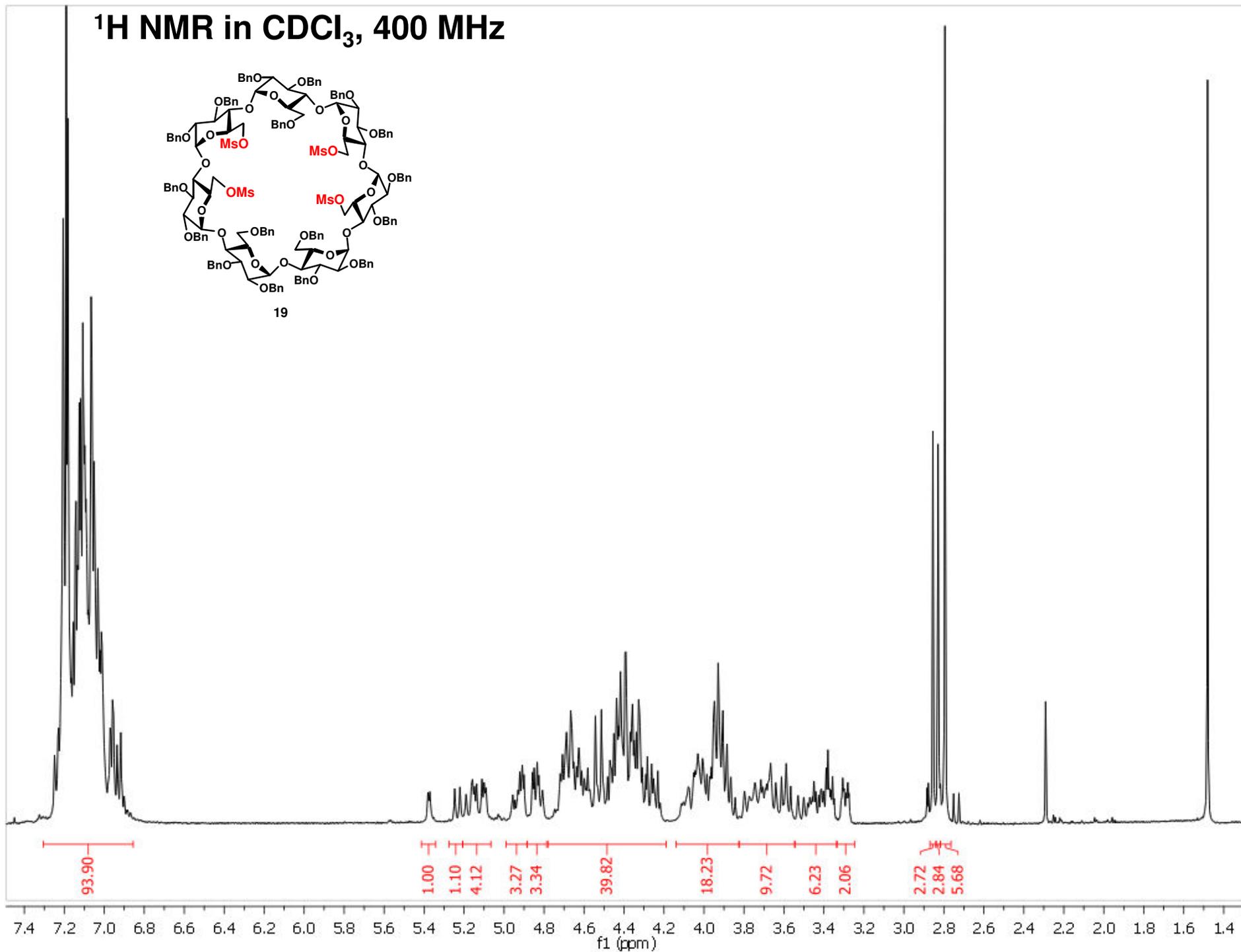
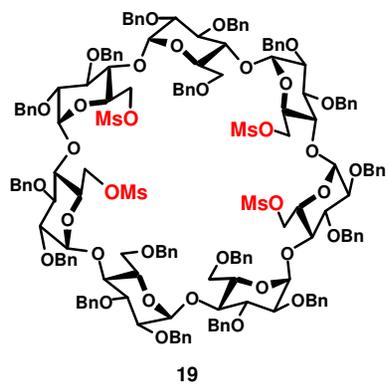
18

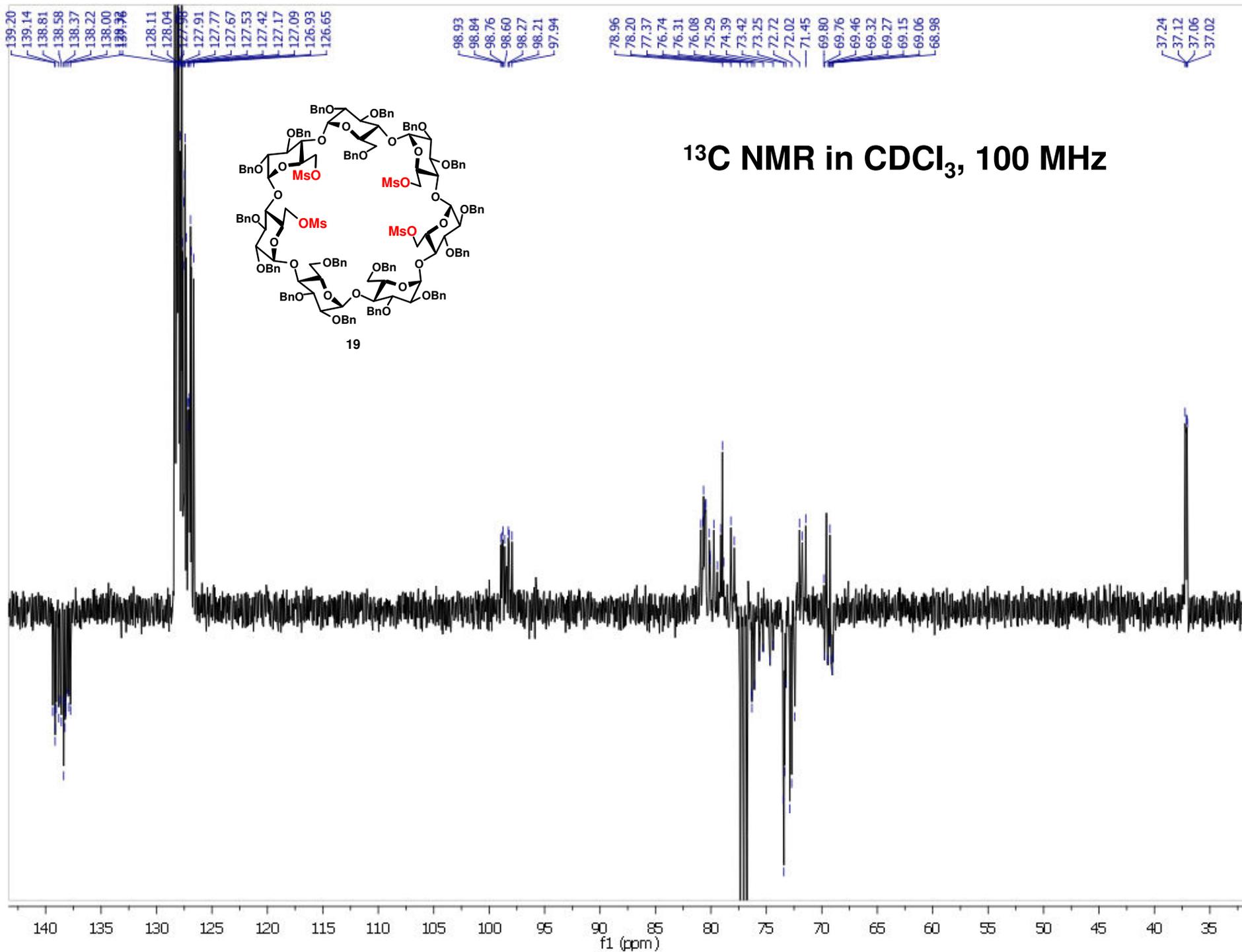
^1H - ^1H COSY NMR in CD_3OD , 400 MHz

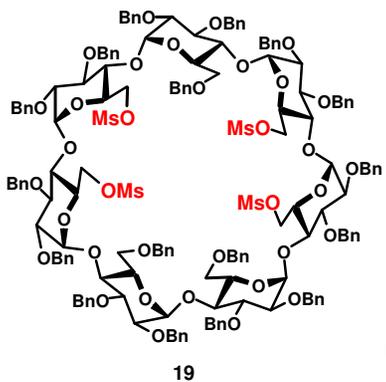


f1 (ppm)

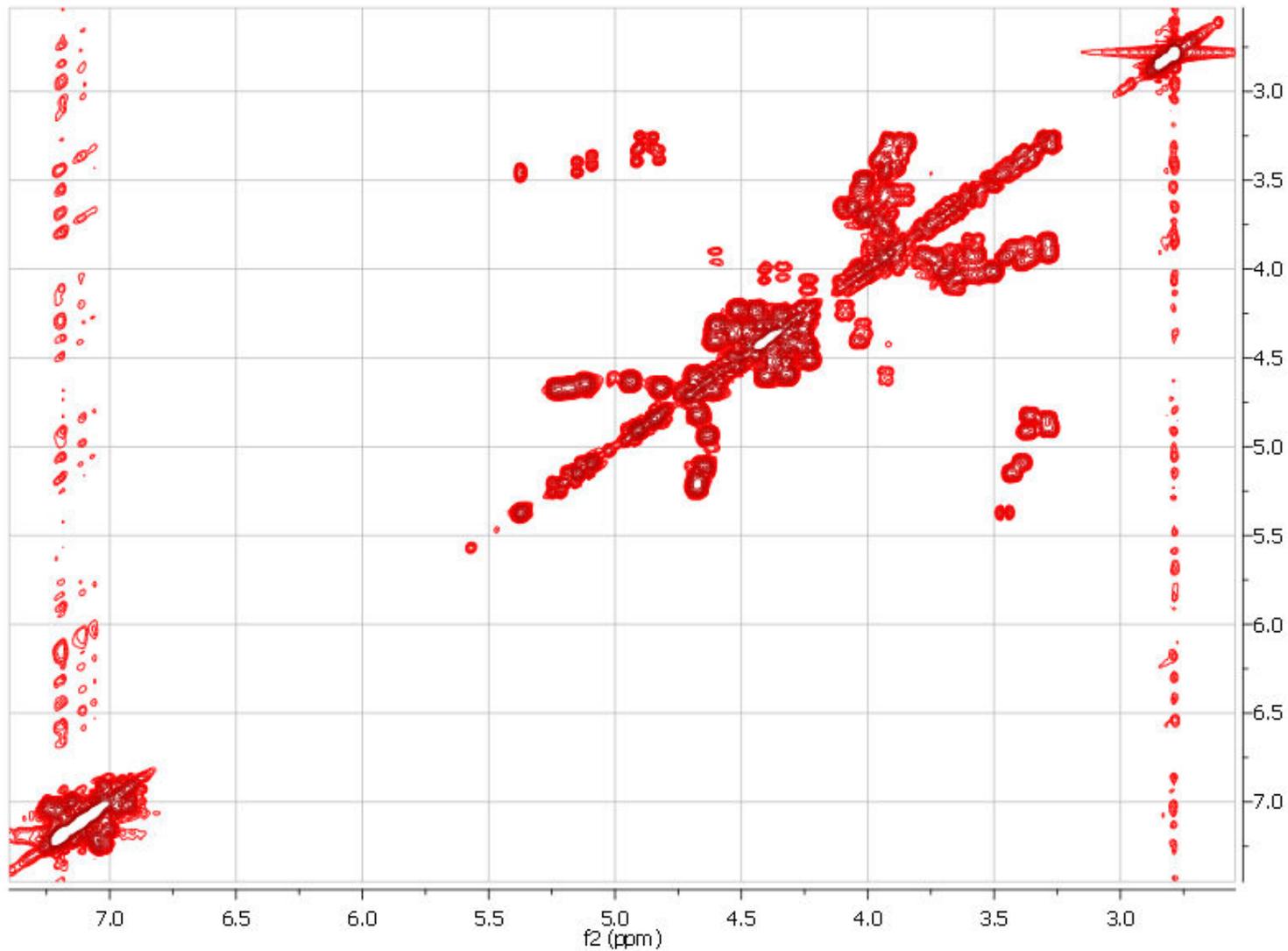
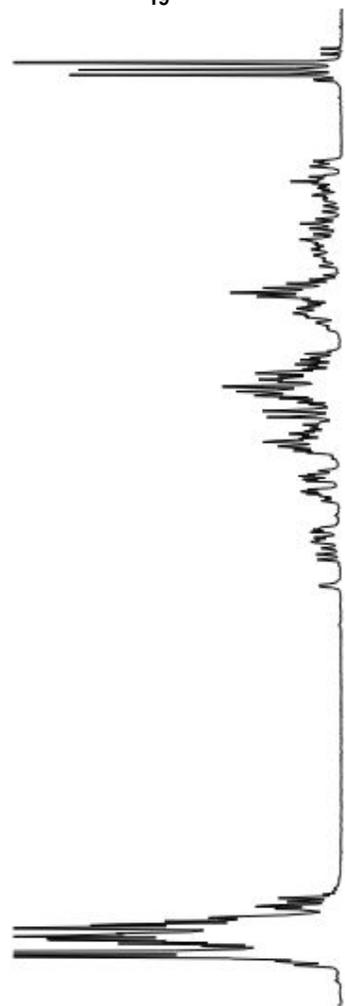
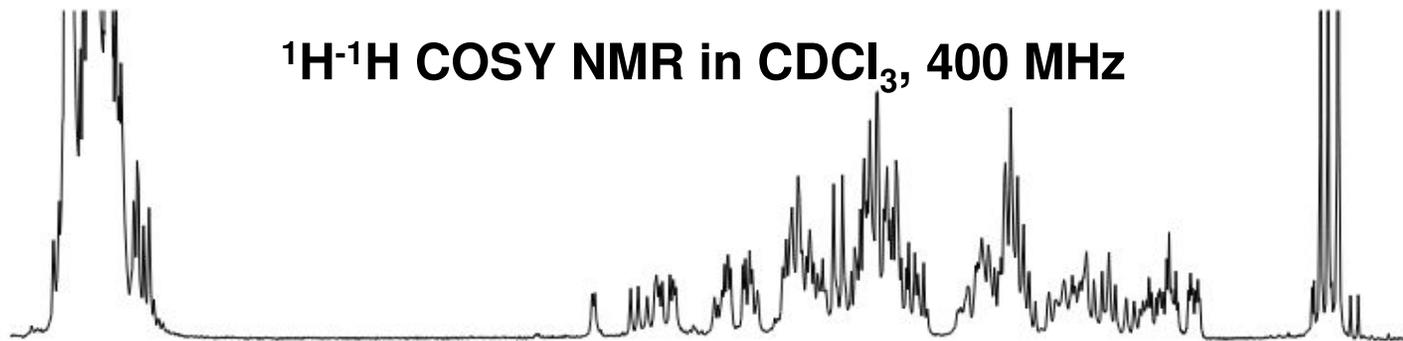
¹H NMR in CDCl₃, 400 MHz



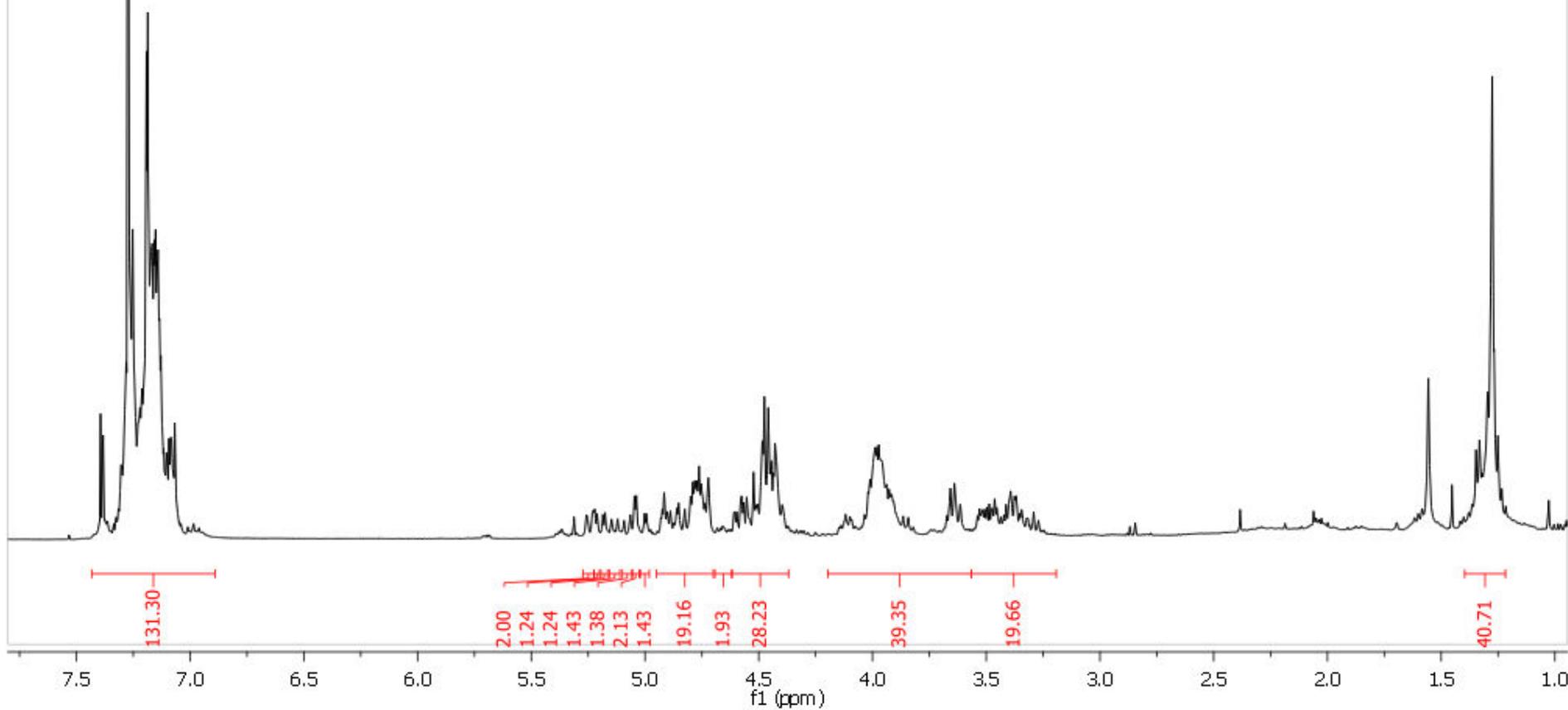
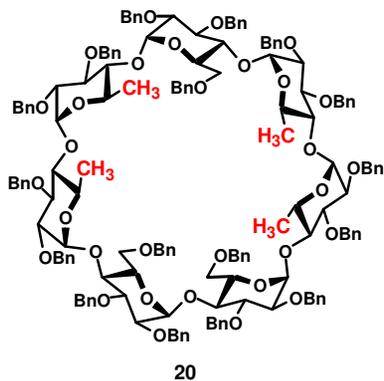




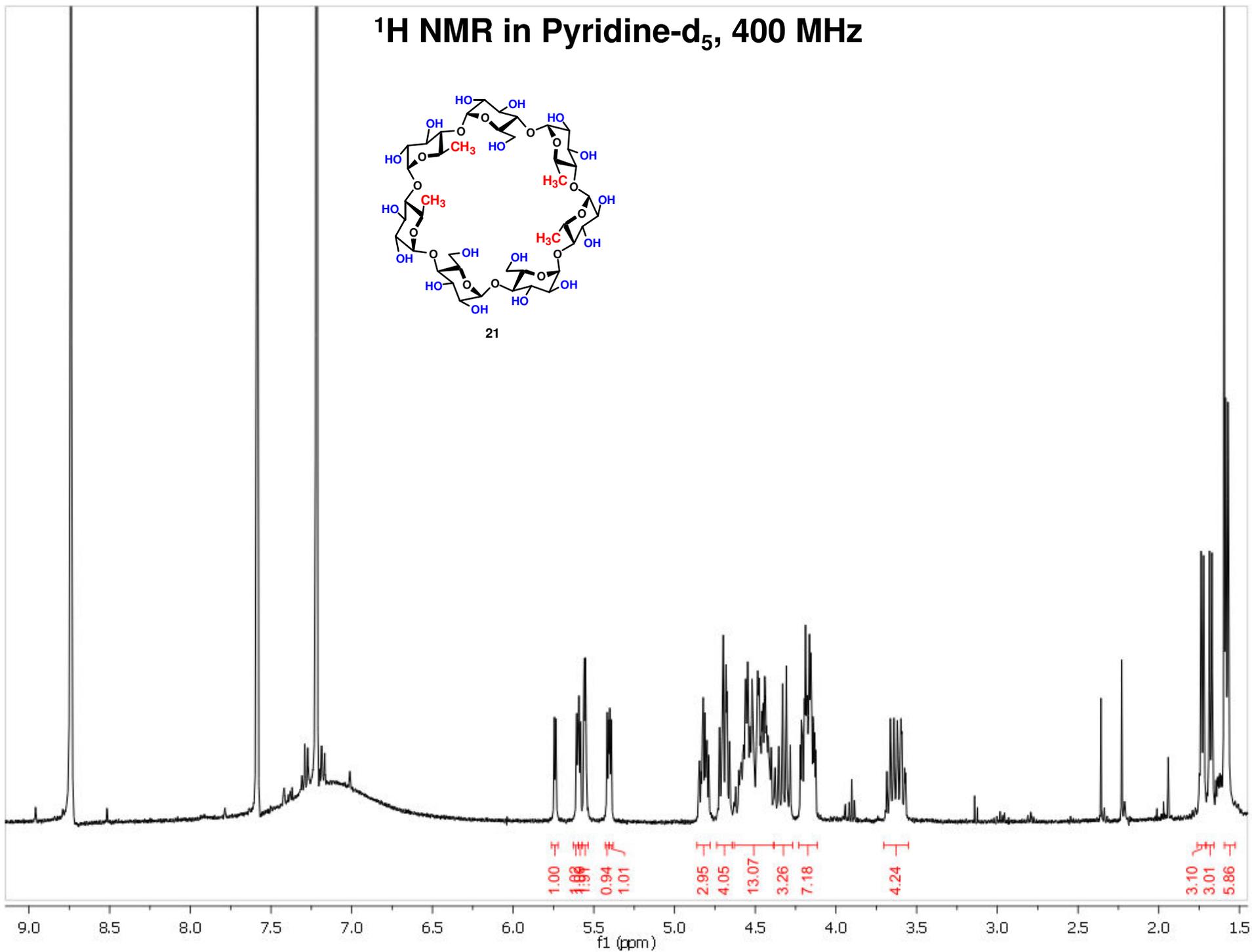
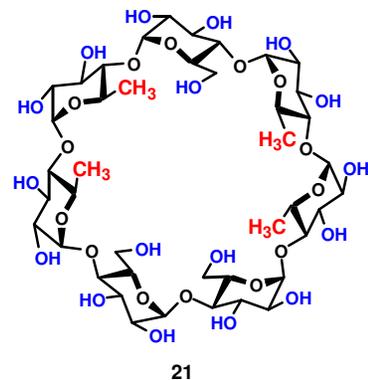
^1H - ^1H COSY NMR in CDCl_3 , 400 MHz

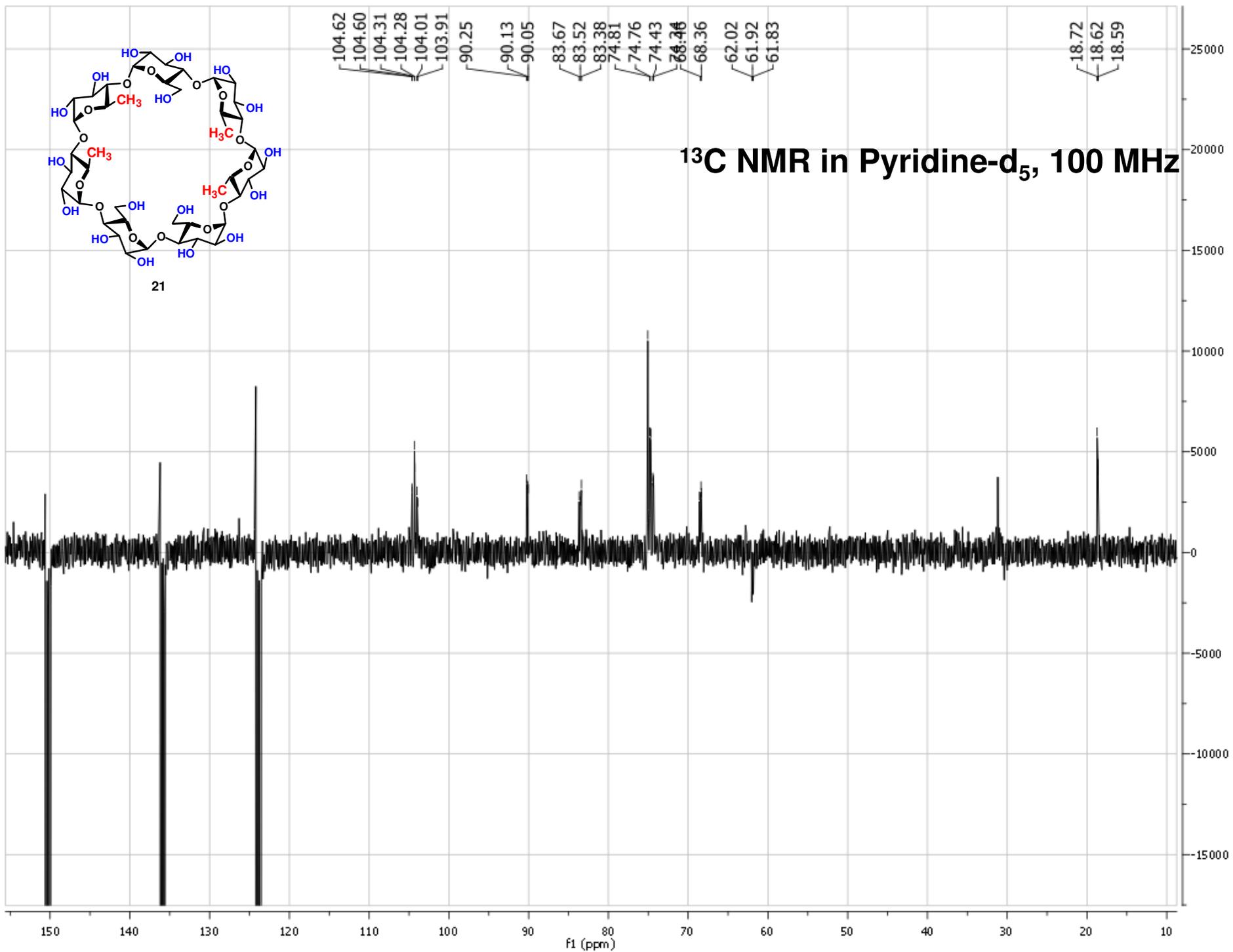


¹H NMR in CDCl₃, 400 MHz

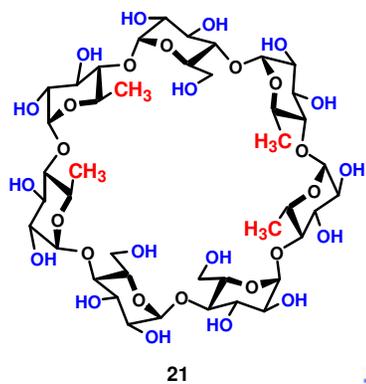


^1H NMR in Pyridine- d_5 , 400 MHz

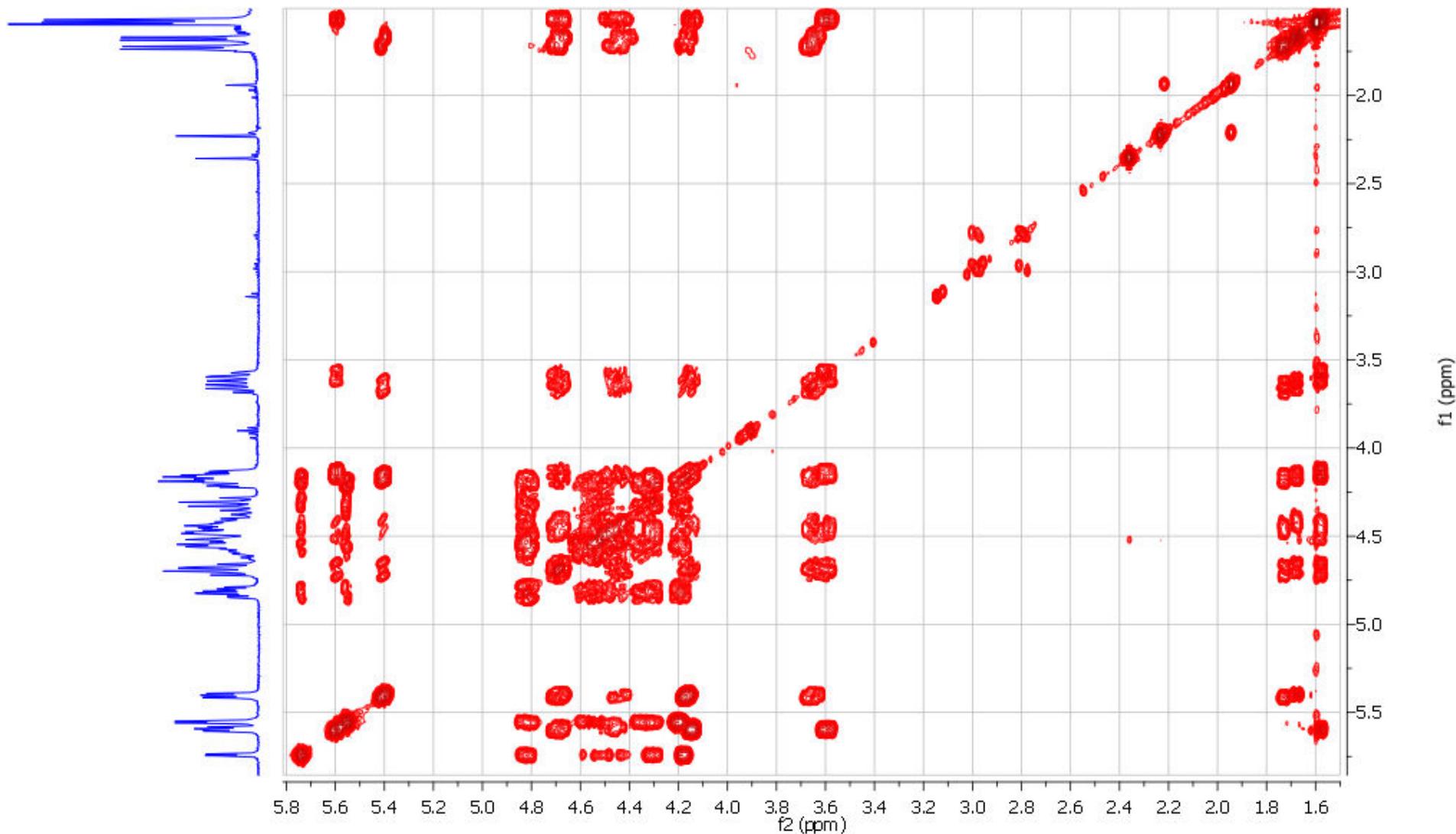




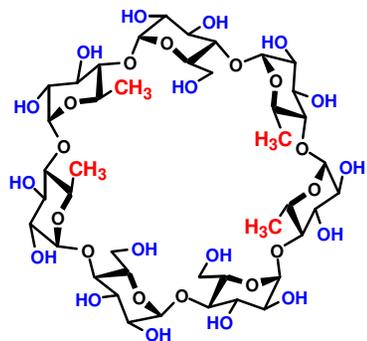
^1H - ^1H TOCSY NMR in Pyridine- d_5 , 400 MHz



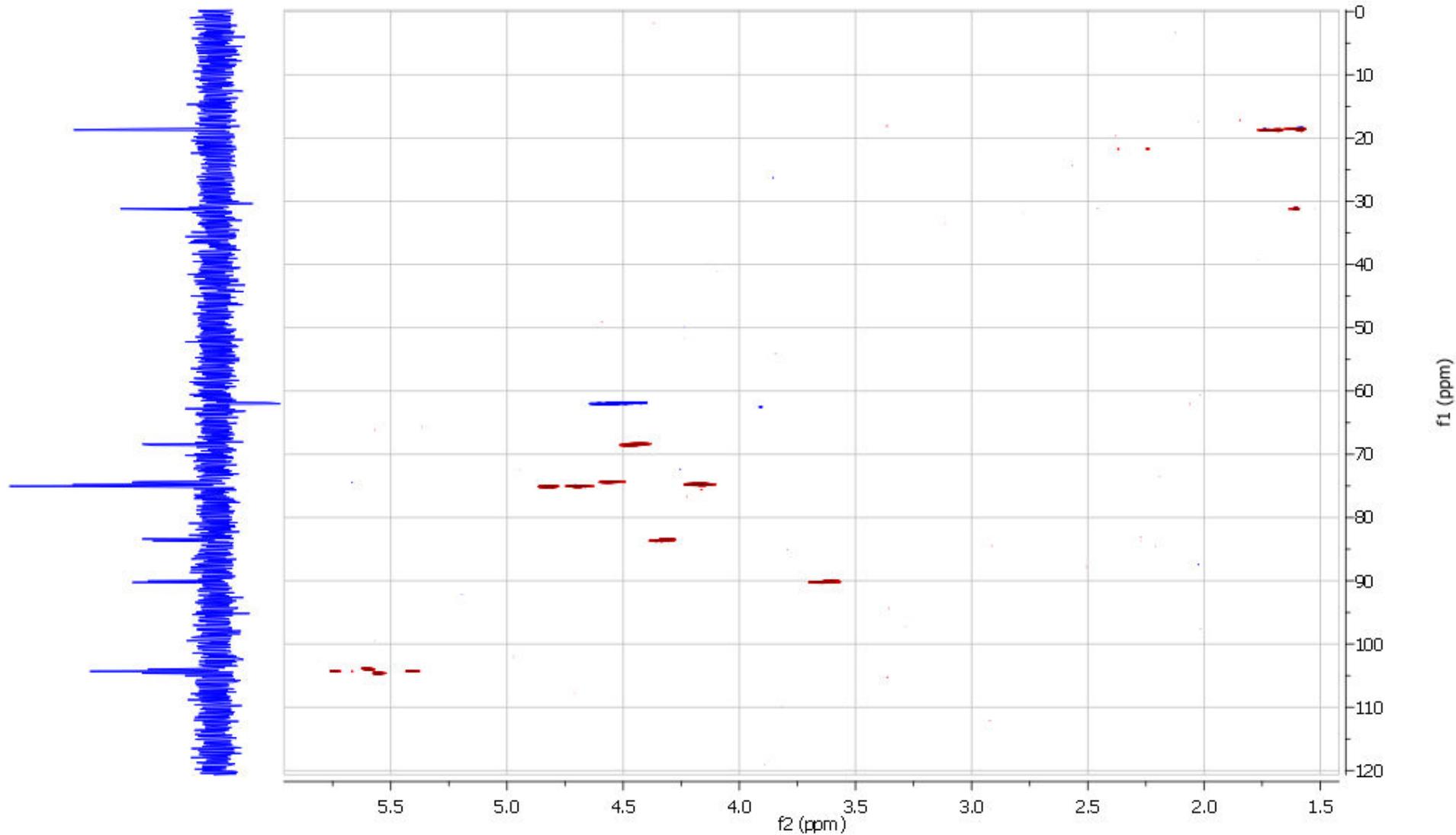
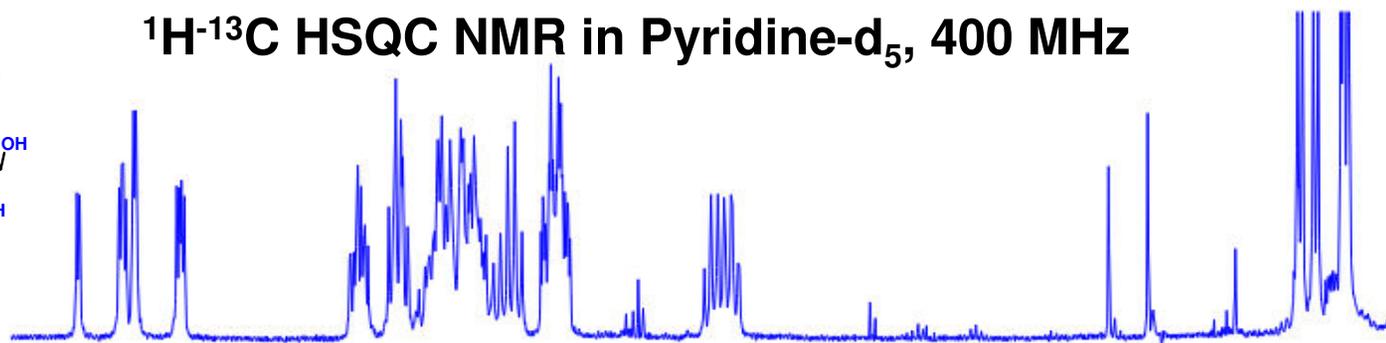
21



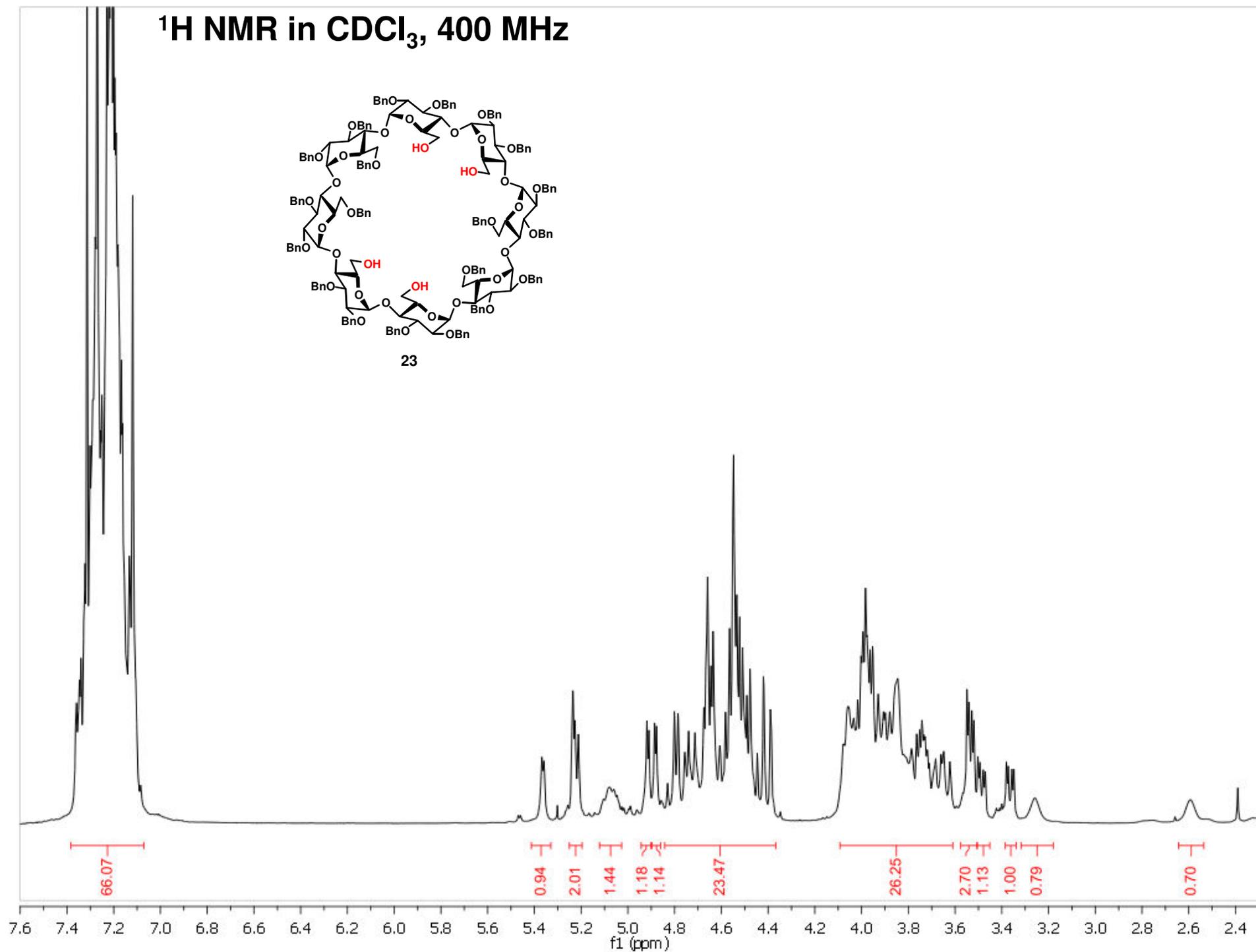
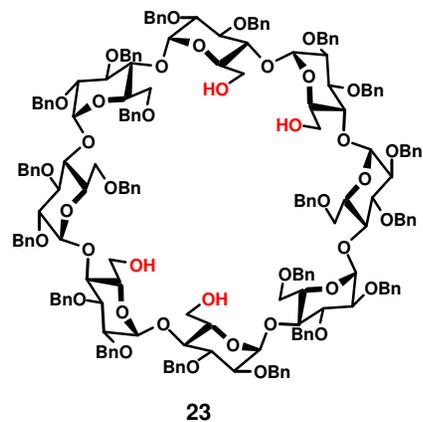
^1H - ^{13}C HSQC NMR in Pyridine- d_5 , 400 MHz

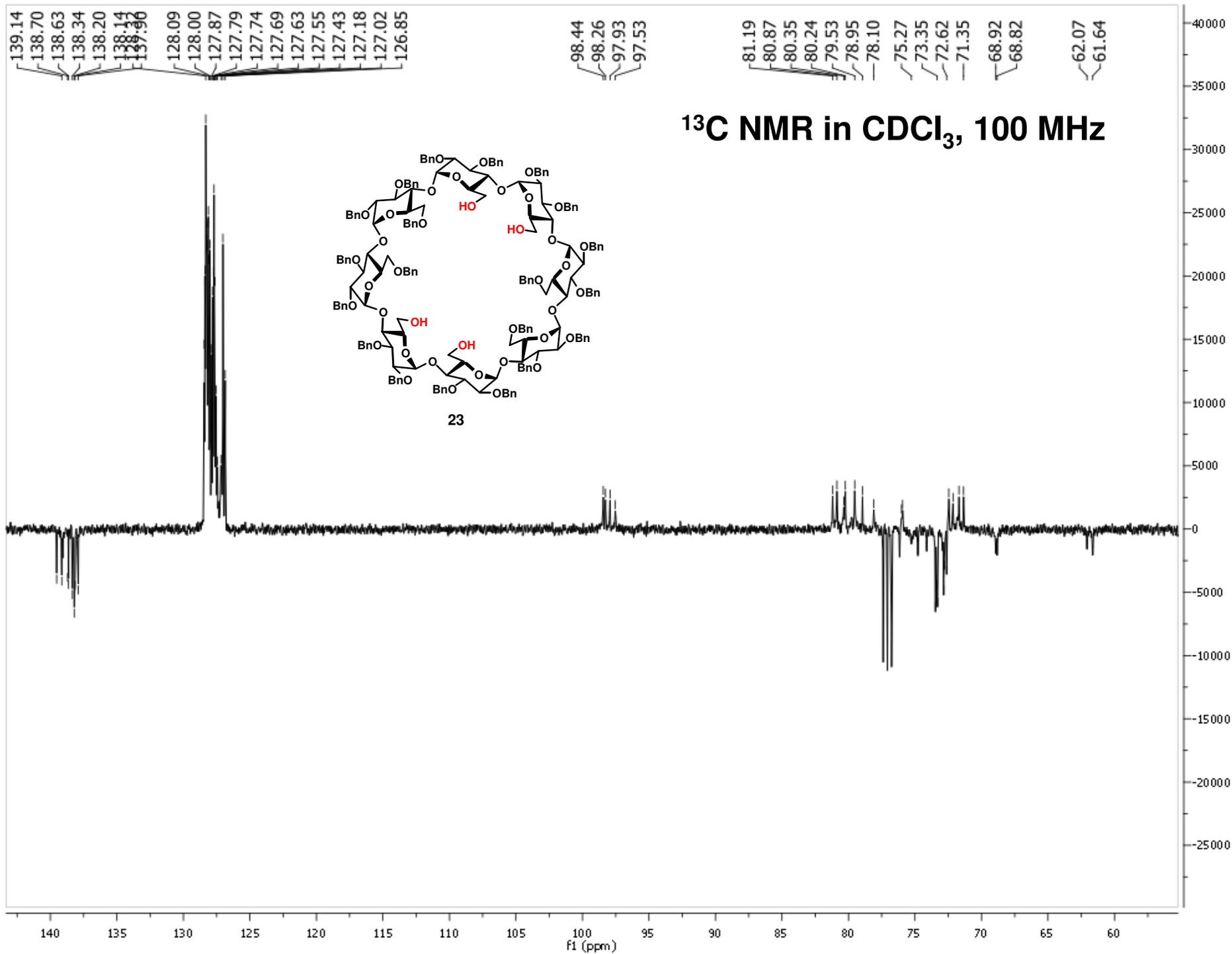


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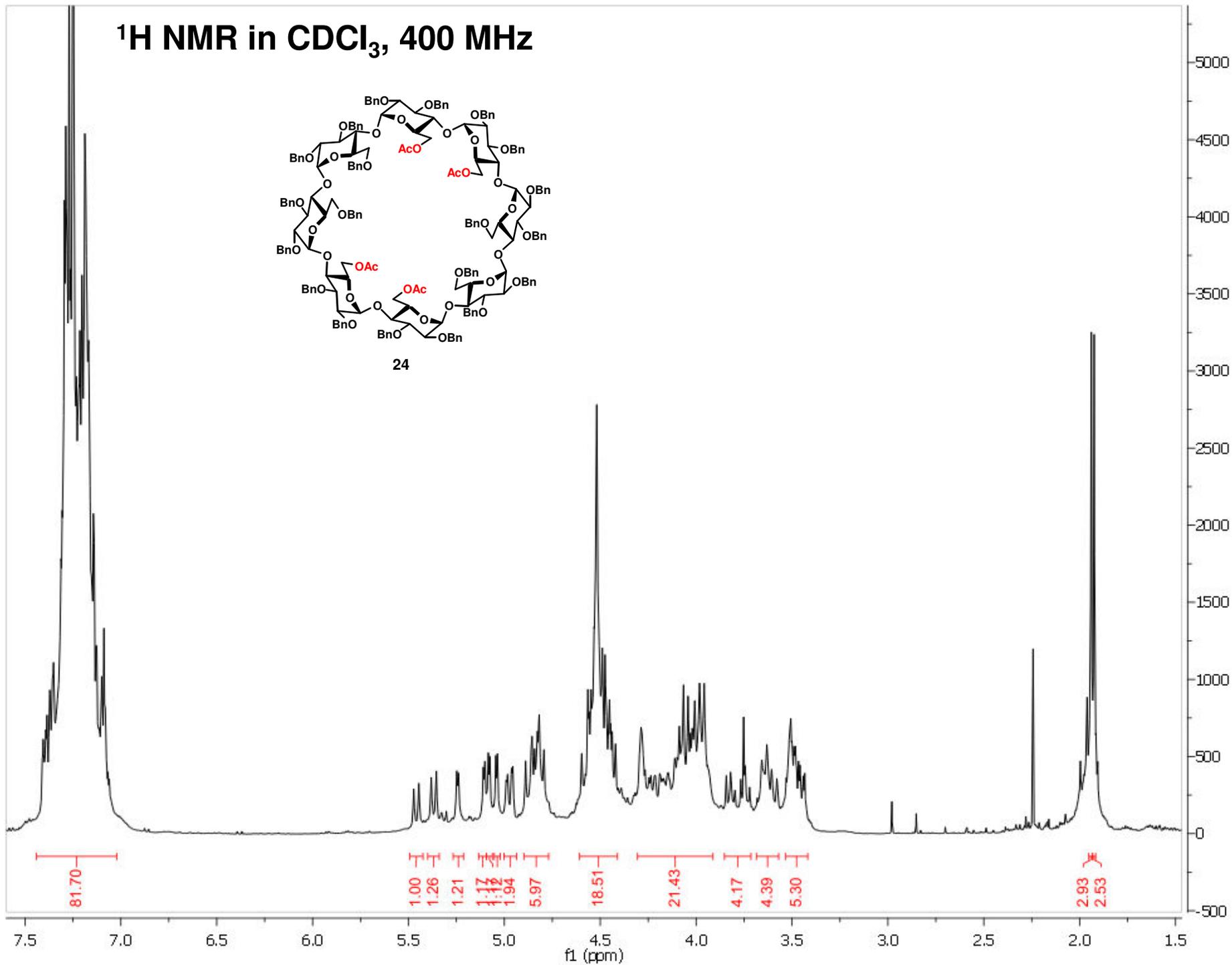
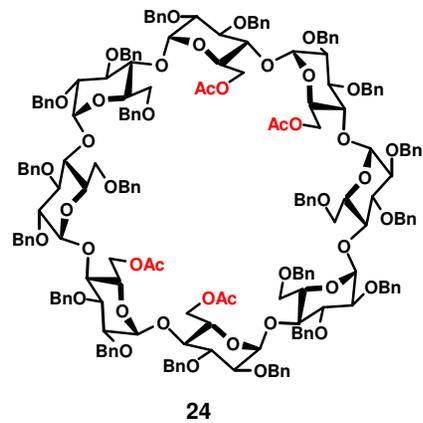


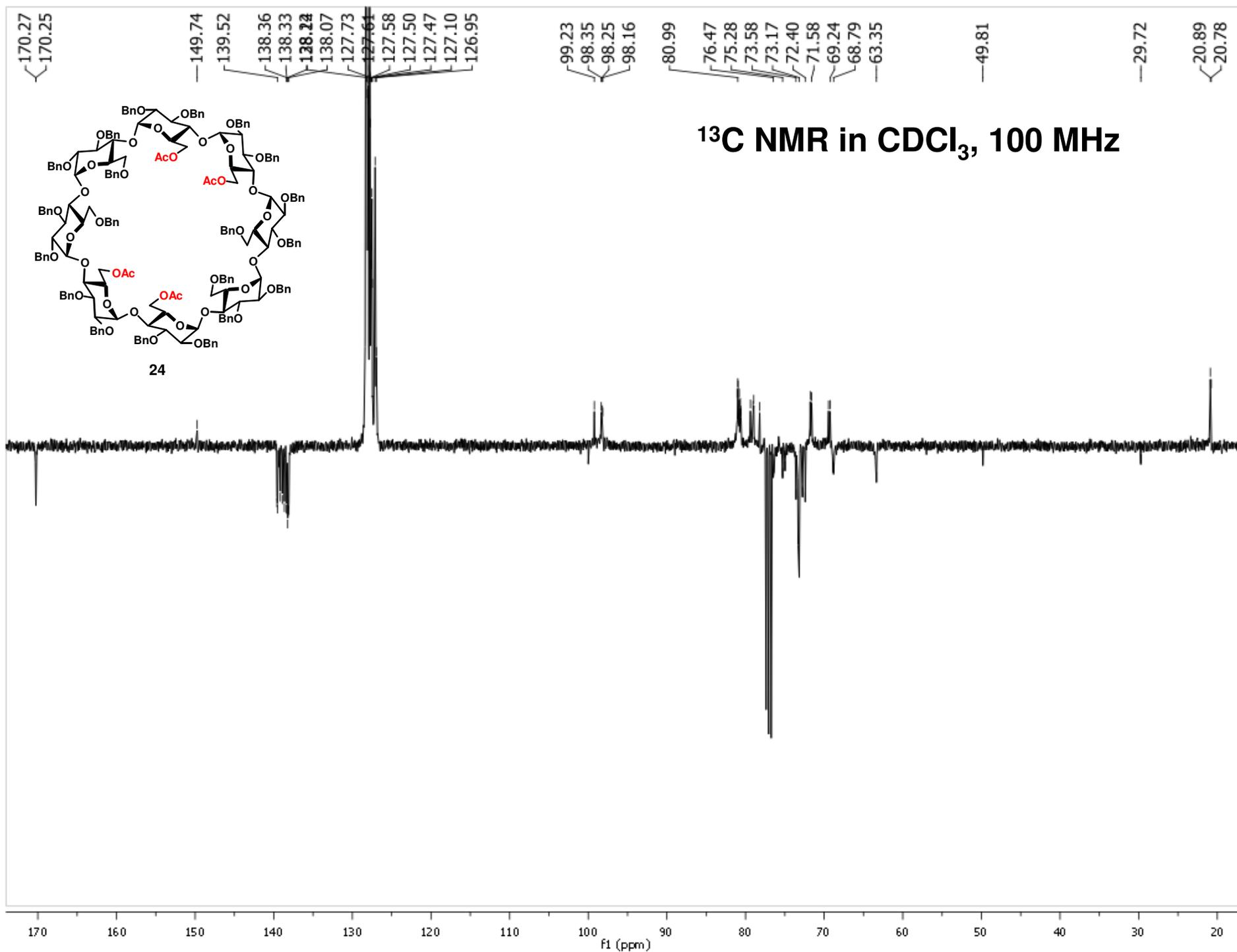
^1H NMR in CDCl_3 , 400 MHz



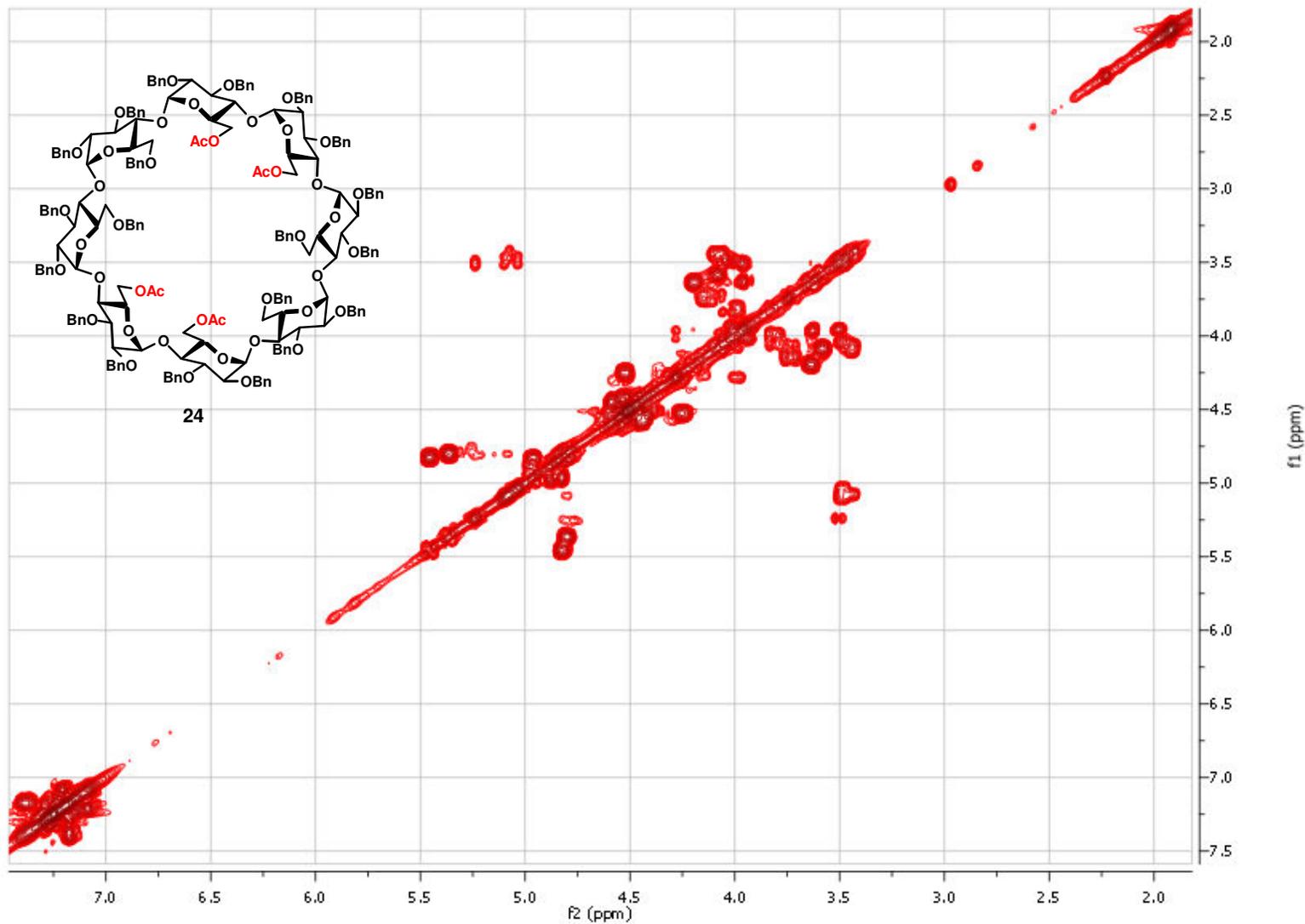
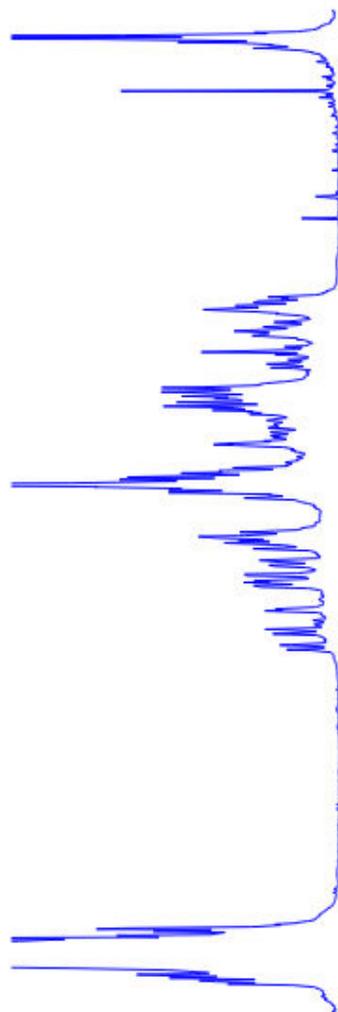
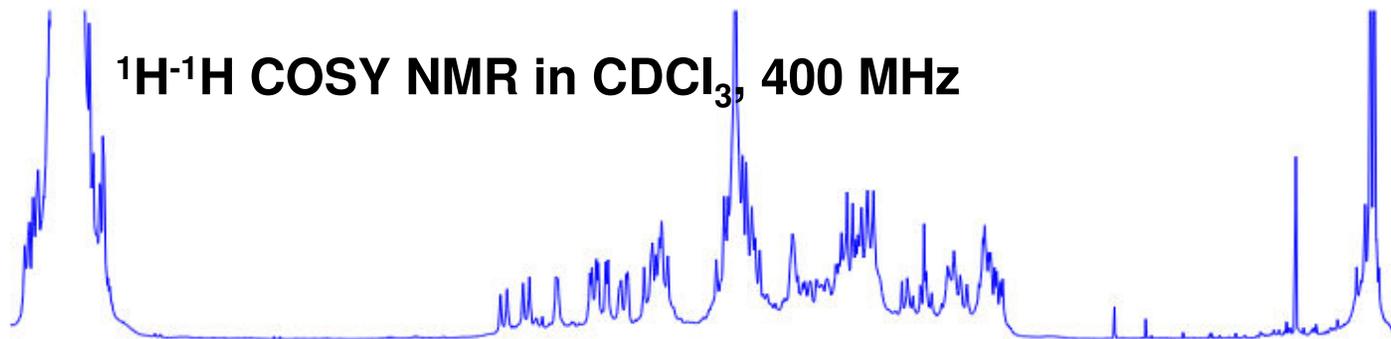


^1H NMR in CDCl_3 , 400 MHz





^1H - ^1H COSY NMR in CDCl_3 , 400 MHz



^1H - ^{13}C HSQC NMR in CDCl_3 , 400 MHz

