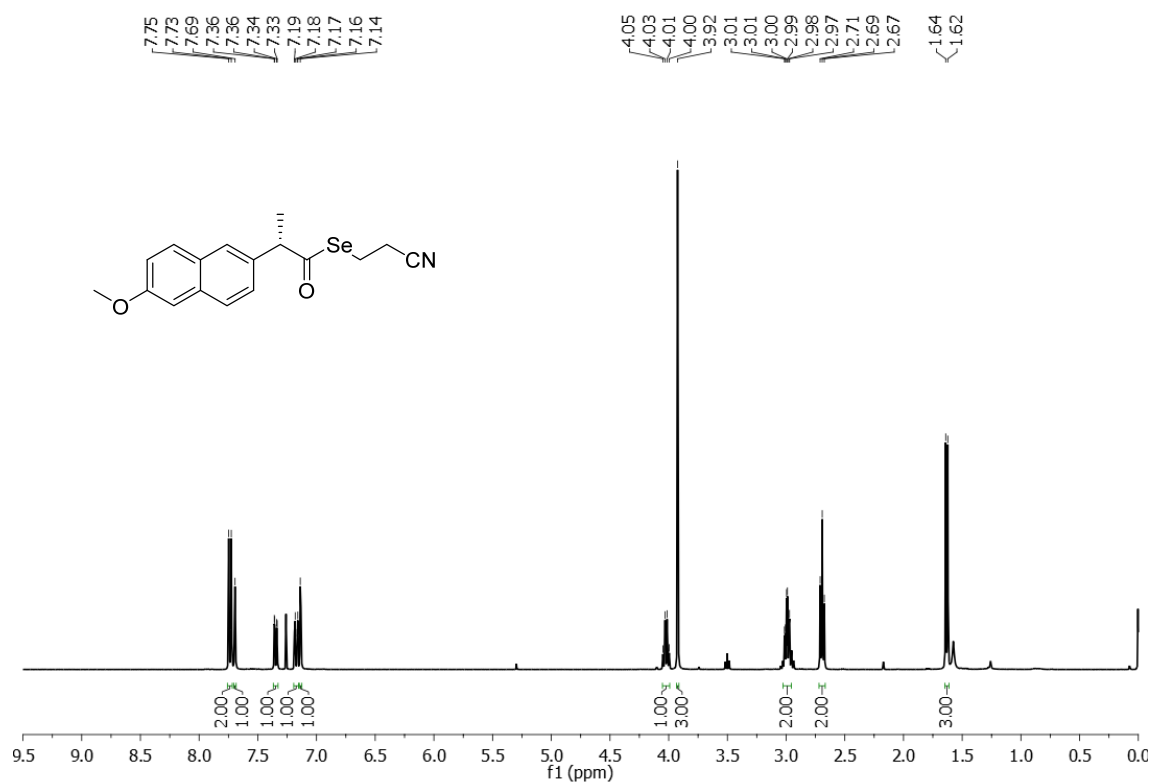


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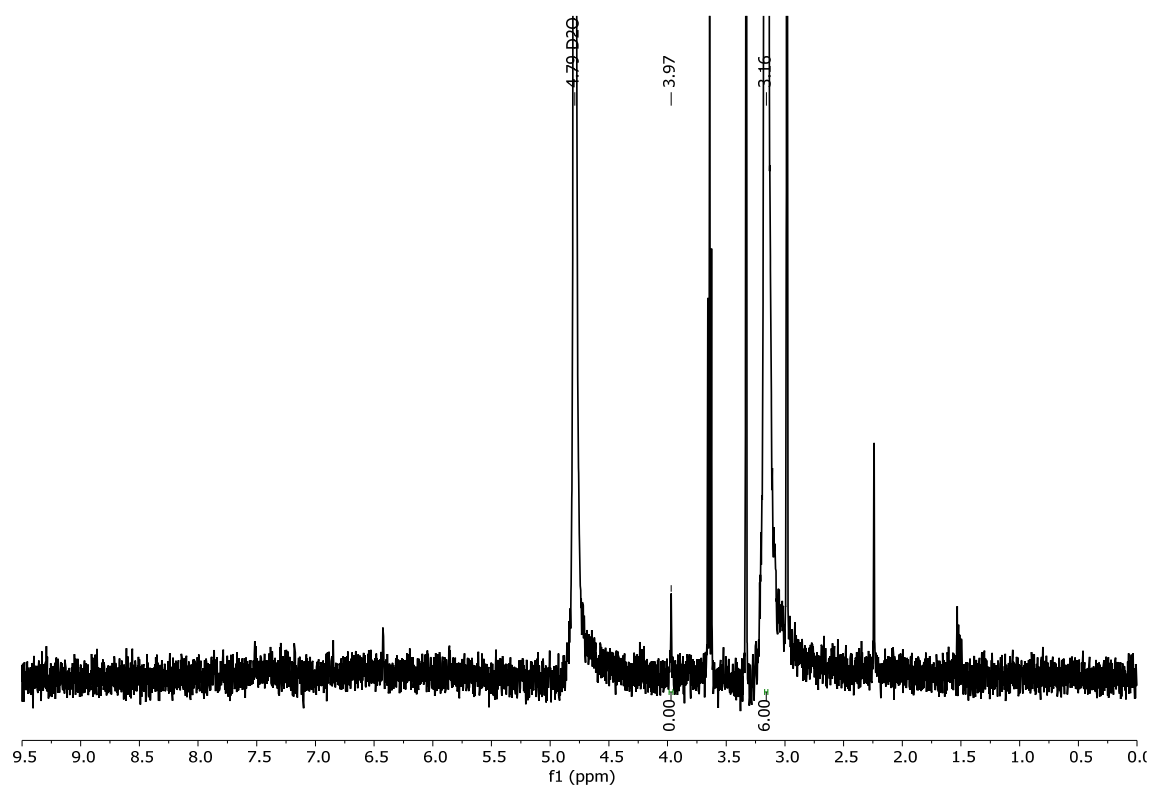
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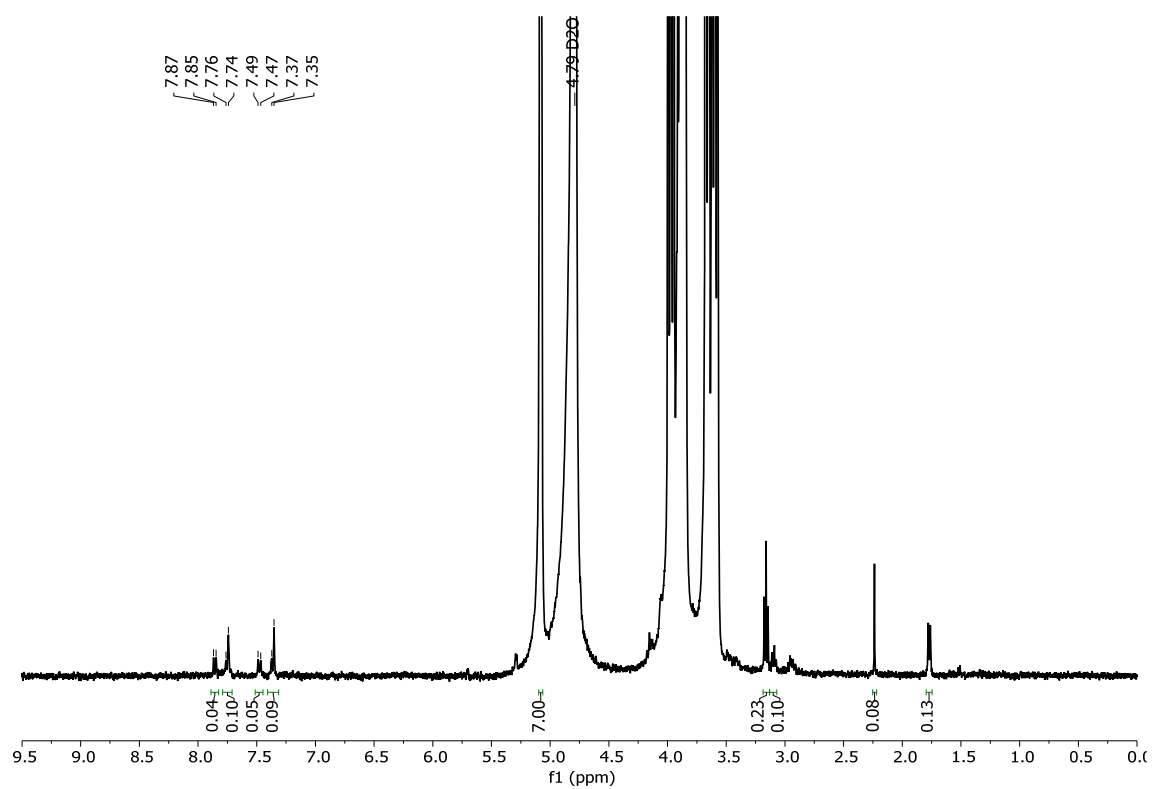
## Characterization – NMR spectra



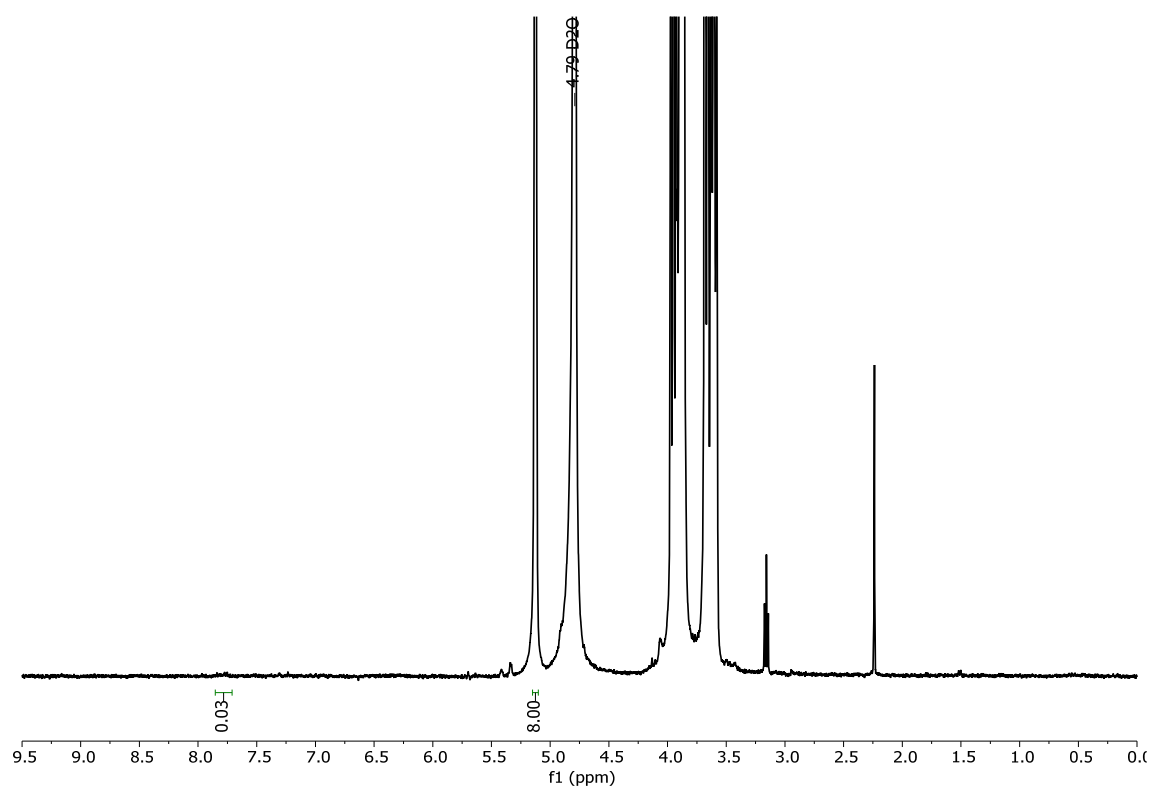
**Figure S1.** <sup>1</sup>H-NMR spectrum of compound **1.3e**.



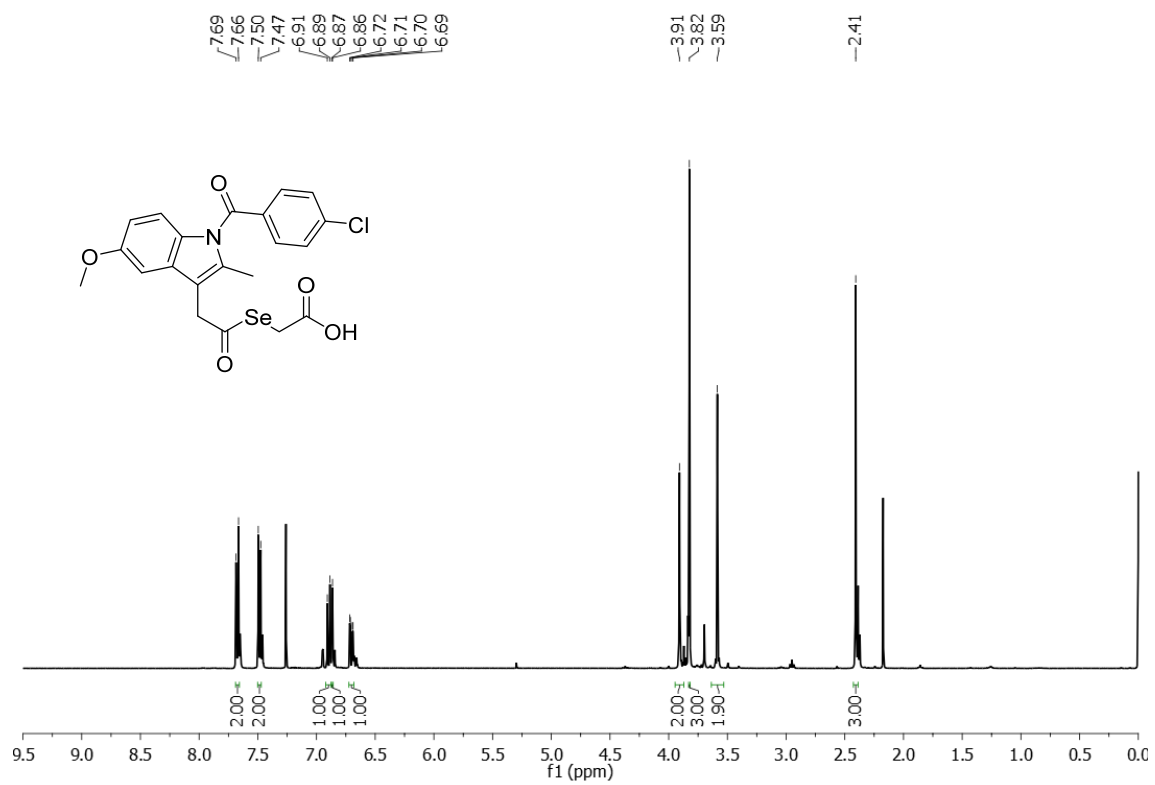
**Figure S2.** <sup>1</sup>H-NMR spectrum of compound **1.3e** and dimethyl sulfone.



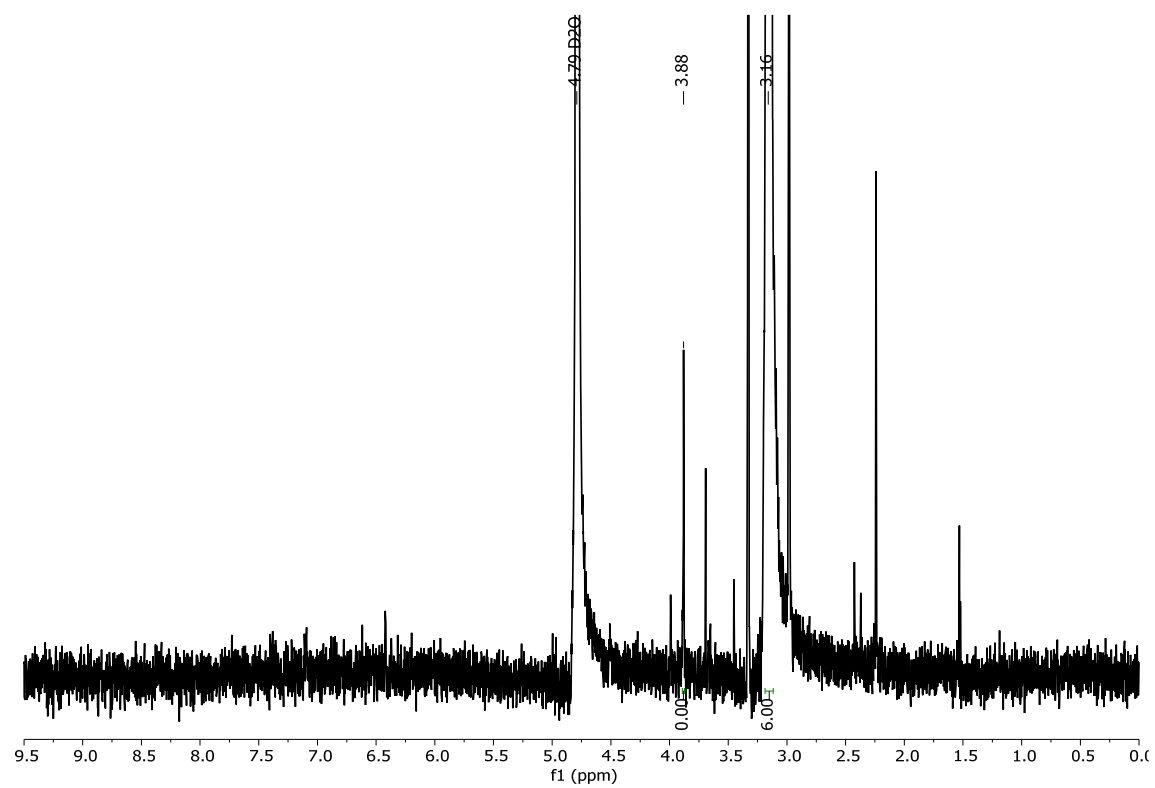
**Figure S3.** <sup>1</sup>H-NMR spectrum of compound **1.3e** and  $\beta$ -CD.



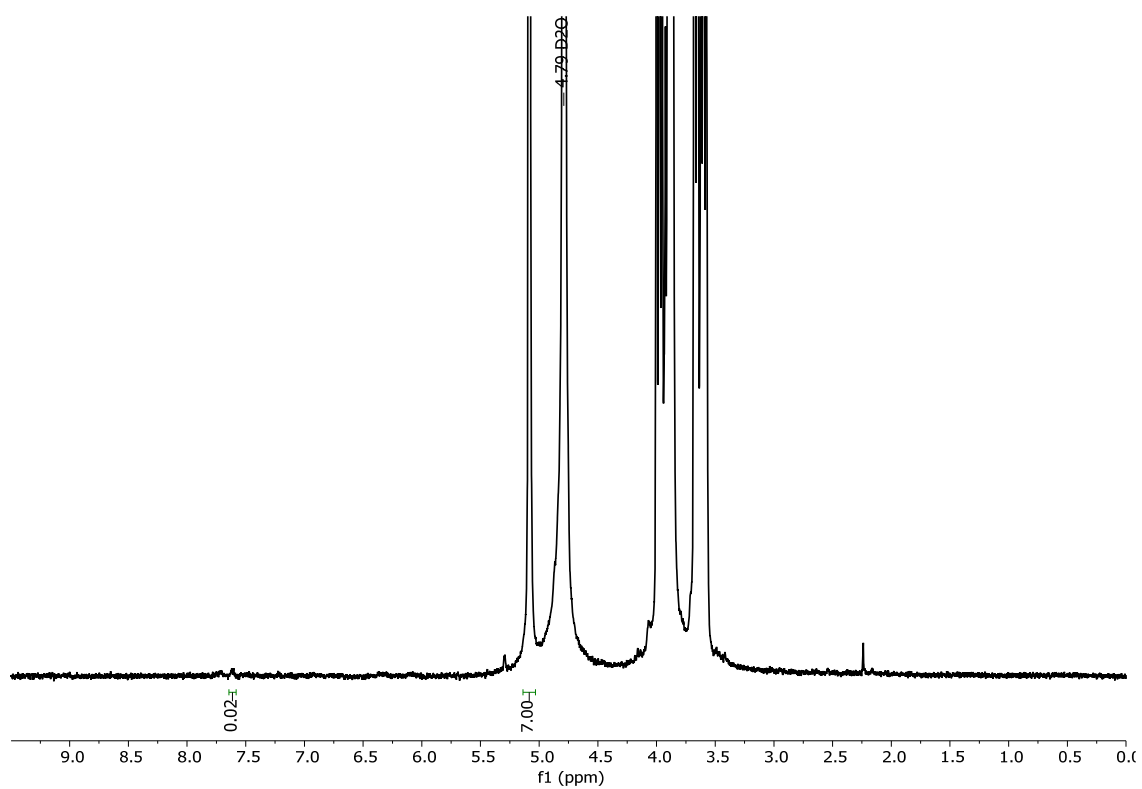
**Figure S4.** <sup>1</sup>H-NMR spectrum of compound **1.3e** and  $\gamma$ -CD.



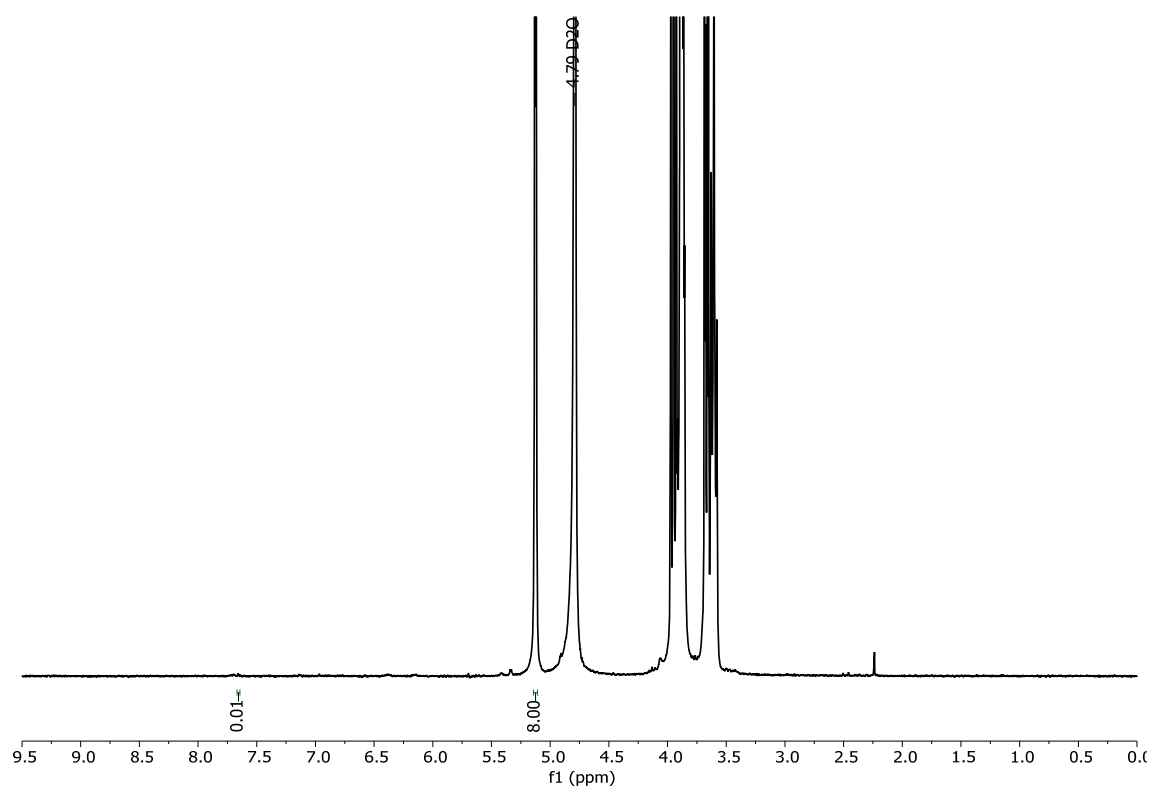
**Figure S5.** <sup>1</sup>H-NMR spectrum of compound **1.4a**.



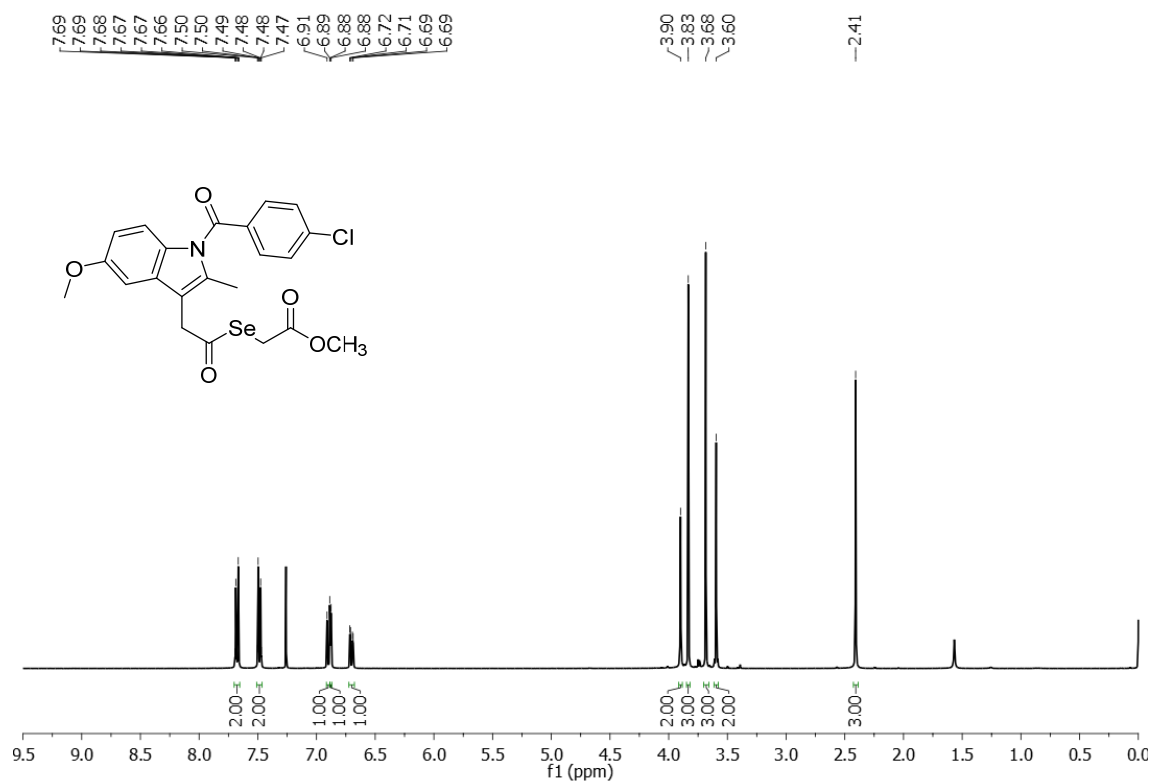
**Figure S6.** <sup>1</sup>H-NMR spectrum of compound **1.4a** and dimethyl sulfone.



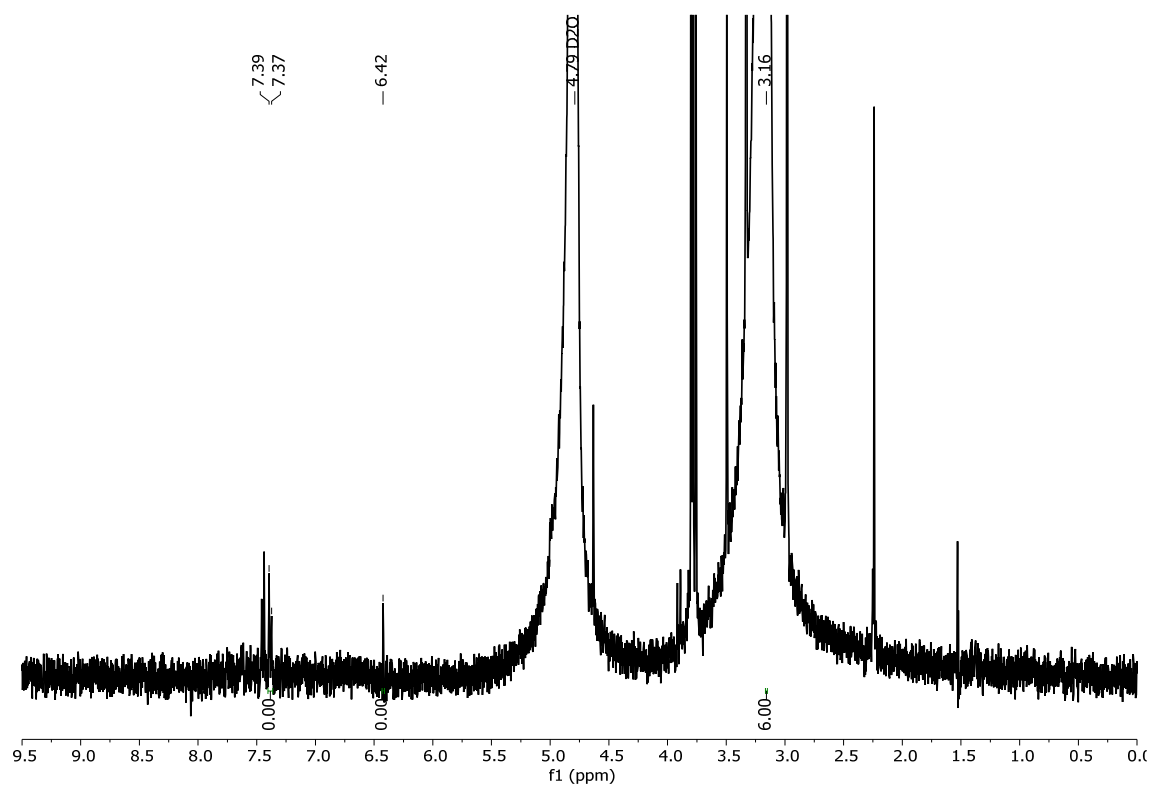
**Figure S7.**  $^1\text{H}$ -NMR spectrum of compound **1.4a** and  $\beta$ -CD.



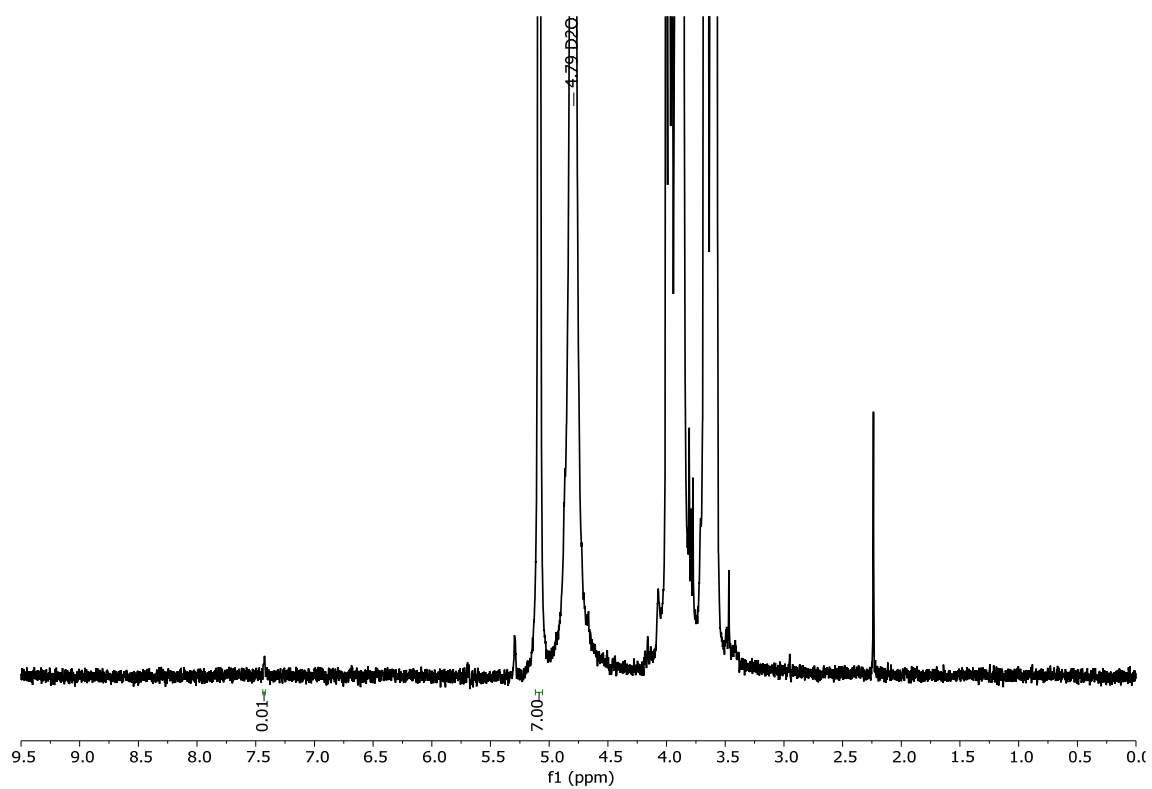
**Figure S8.**  $^1\text{H}$ -NMR spectrum of compound **1.4a** and  $\gamma$ -CD.



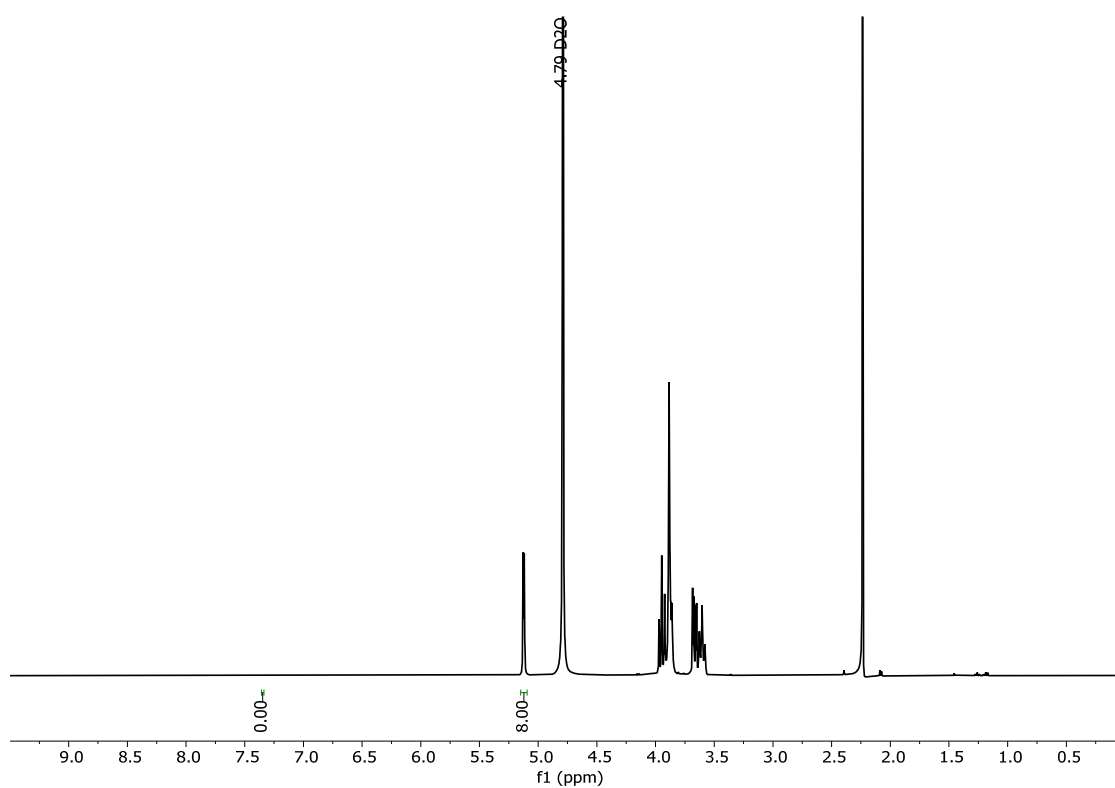
**Figure S9.** <sup>1</sup>H-NMR spectrum of compound **1.4b**.



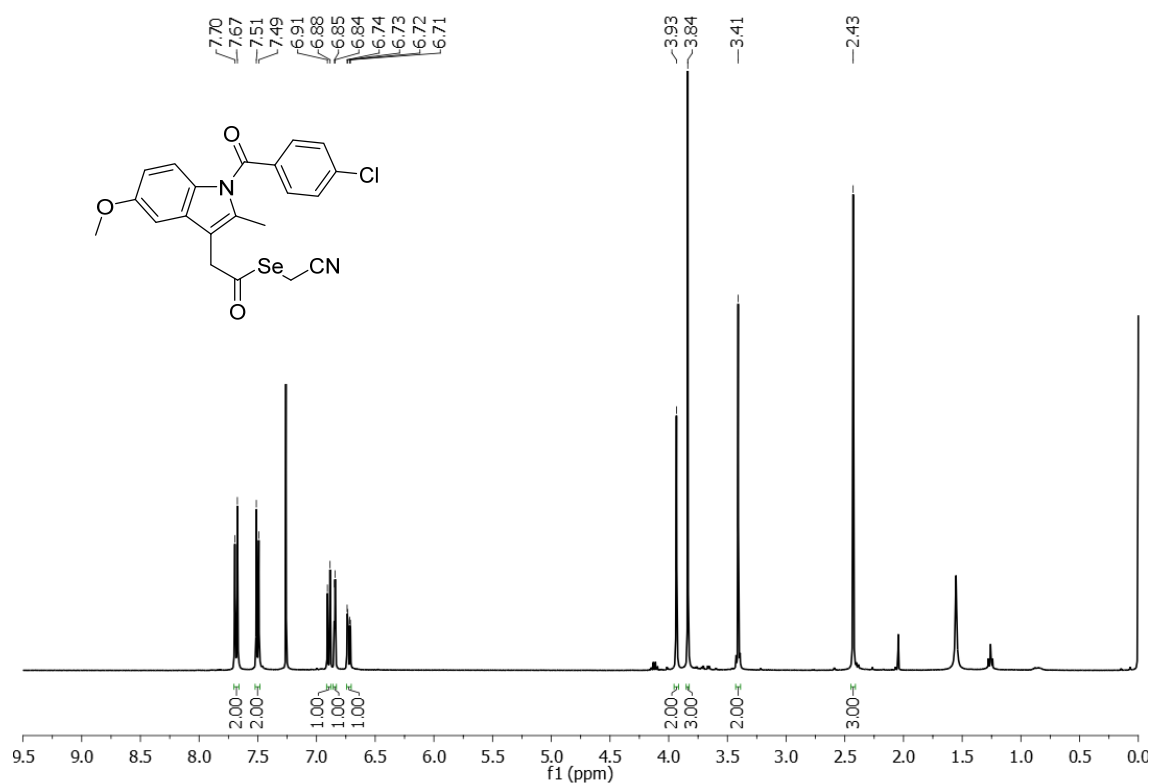
**Figure S10.** <sup>1</sup>H-NMR spectrum of compound **1.4b** and dimethyl sulfone.



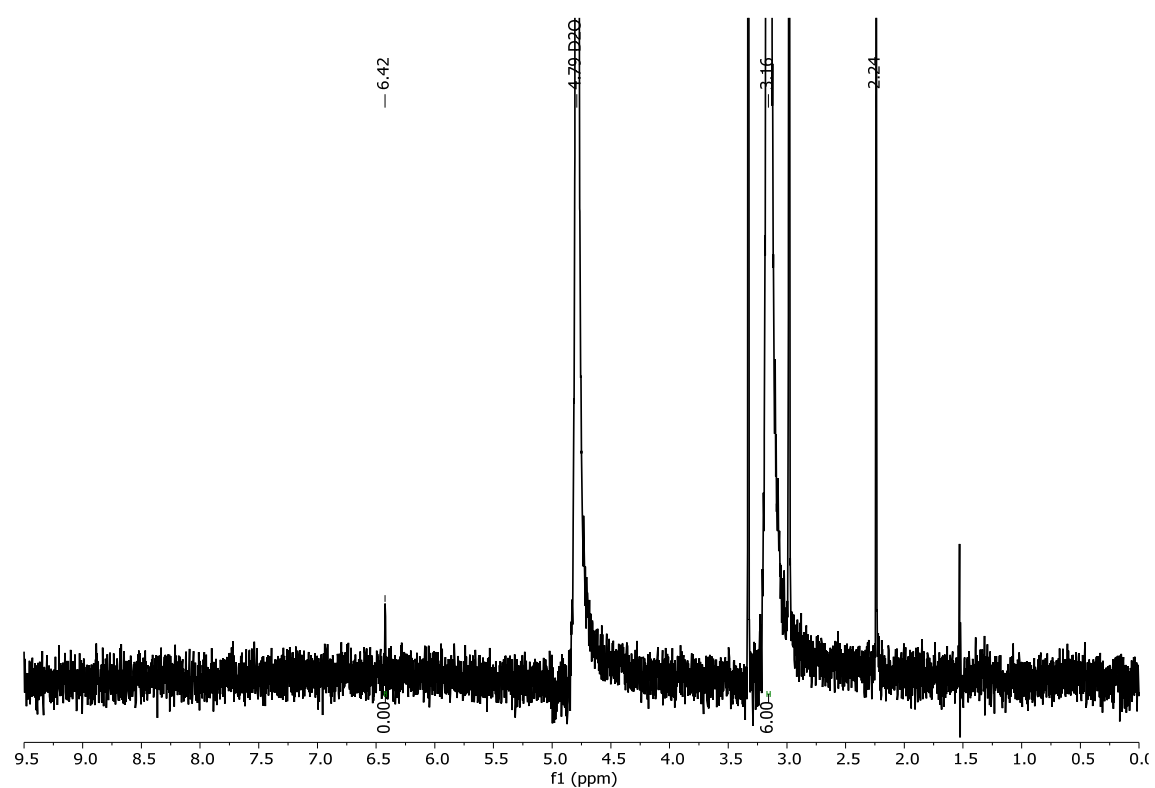
**Figure S11.** <sup>1</sup>H-NMR spectrum of compound **1.4b** and β-CD.



**Figure S12.** <sup>1</sup>H-NMR spectrum of compound **1.4b** and γ-CD.

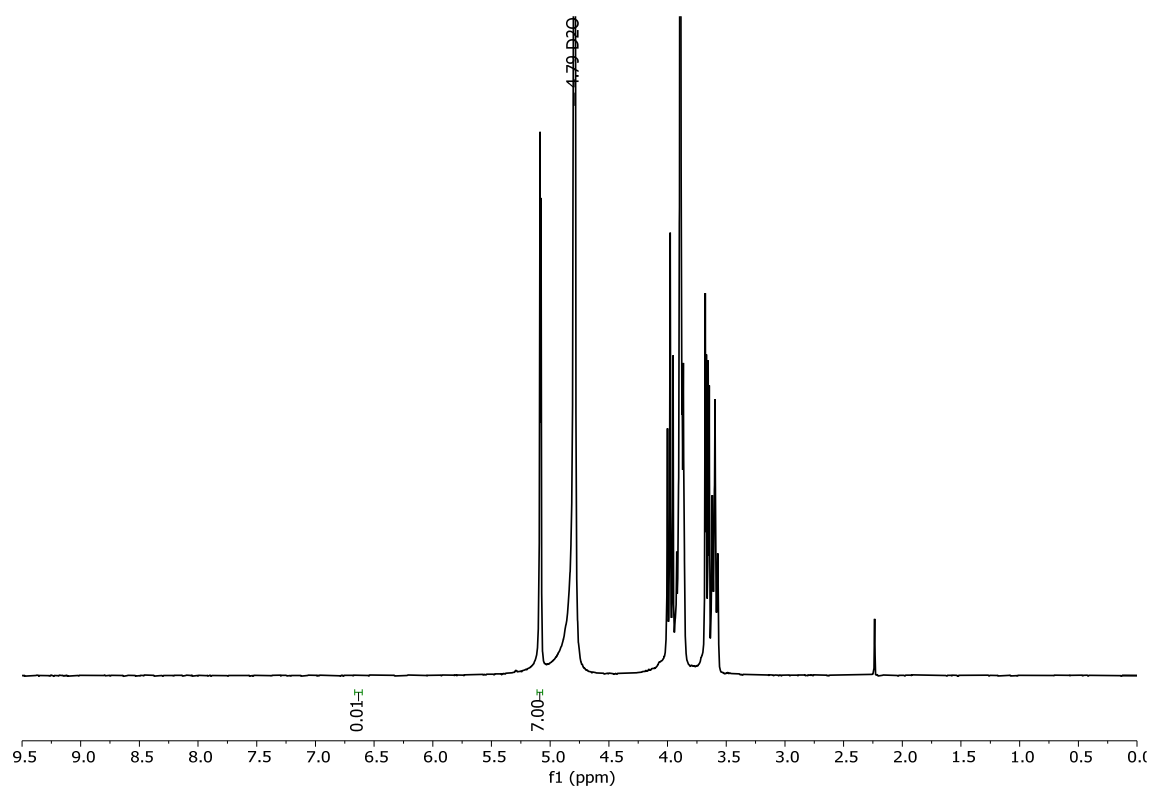


**Figure S13.** <sup>1</sup>H-NMR spectrum of compound **1.4d**.

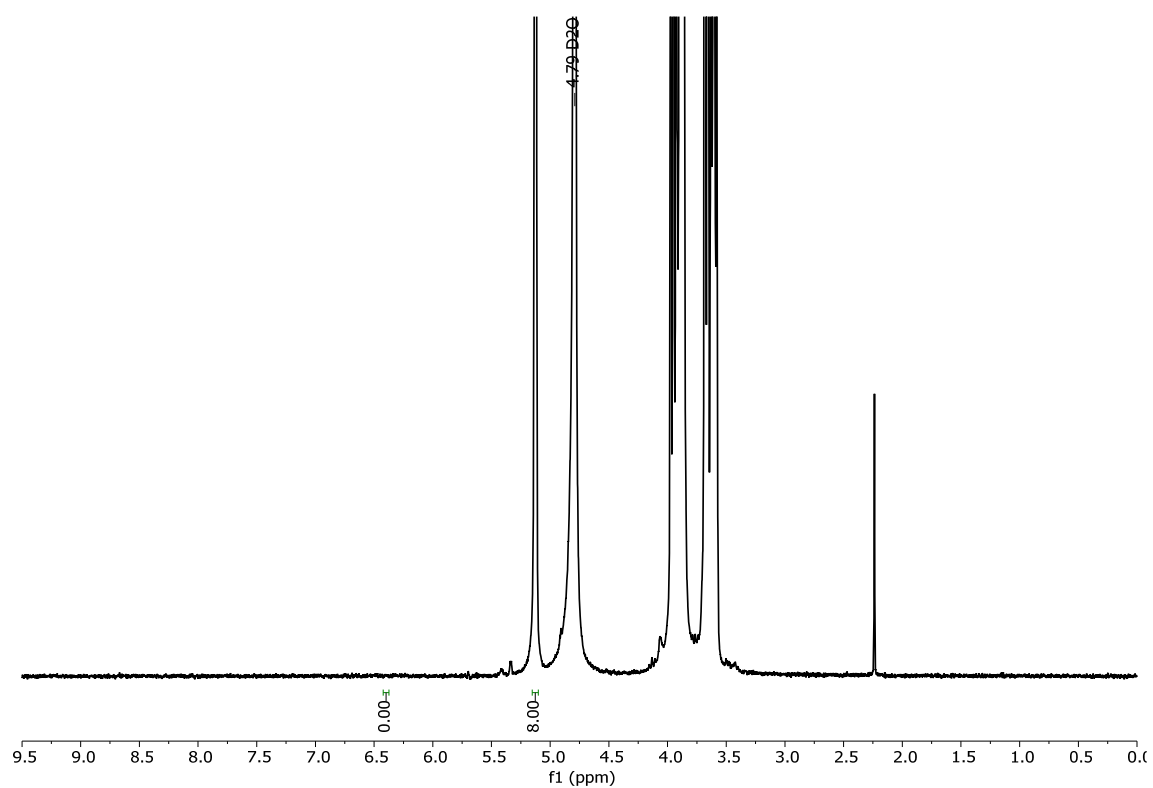


**Figure S14.** <sup>1</sup>H-NMR spectrum of compound **1.4d** and dimethyl sulfone.

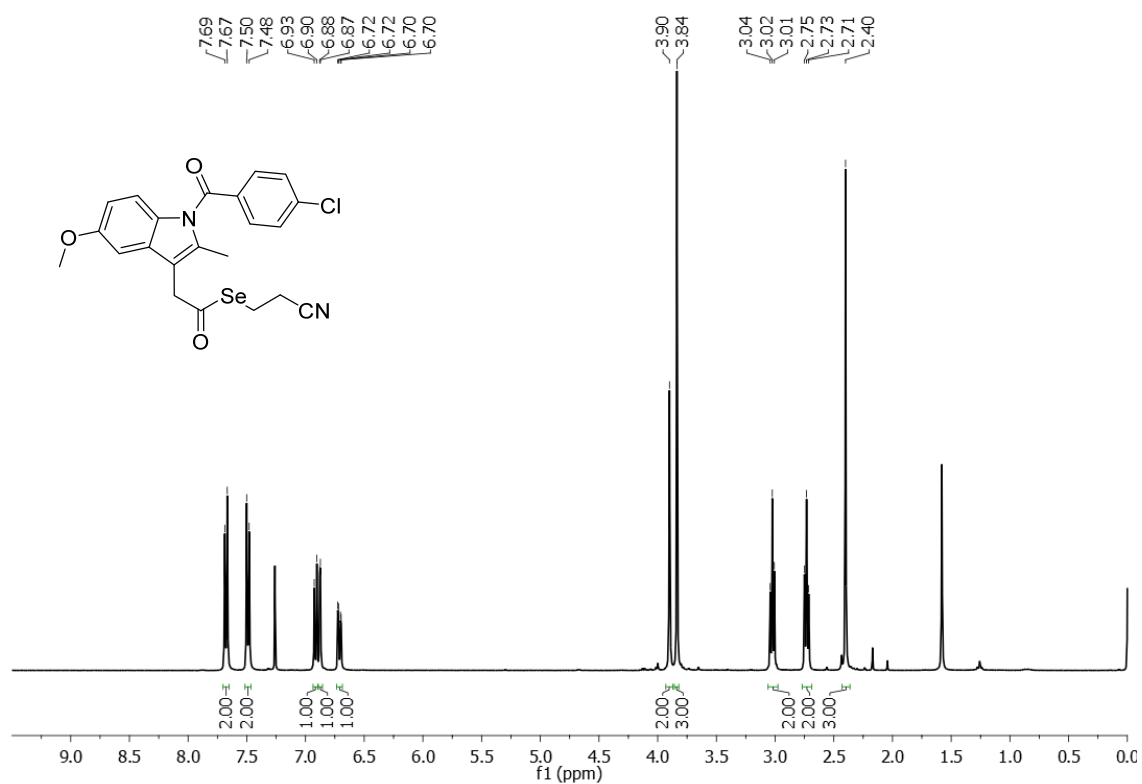




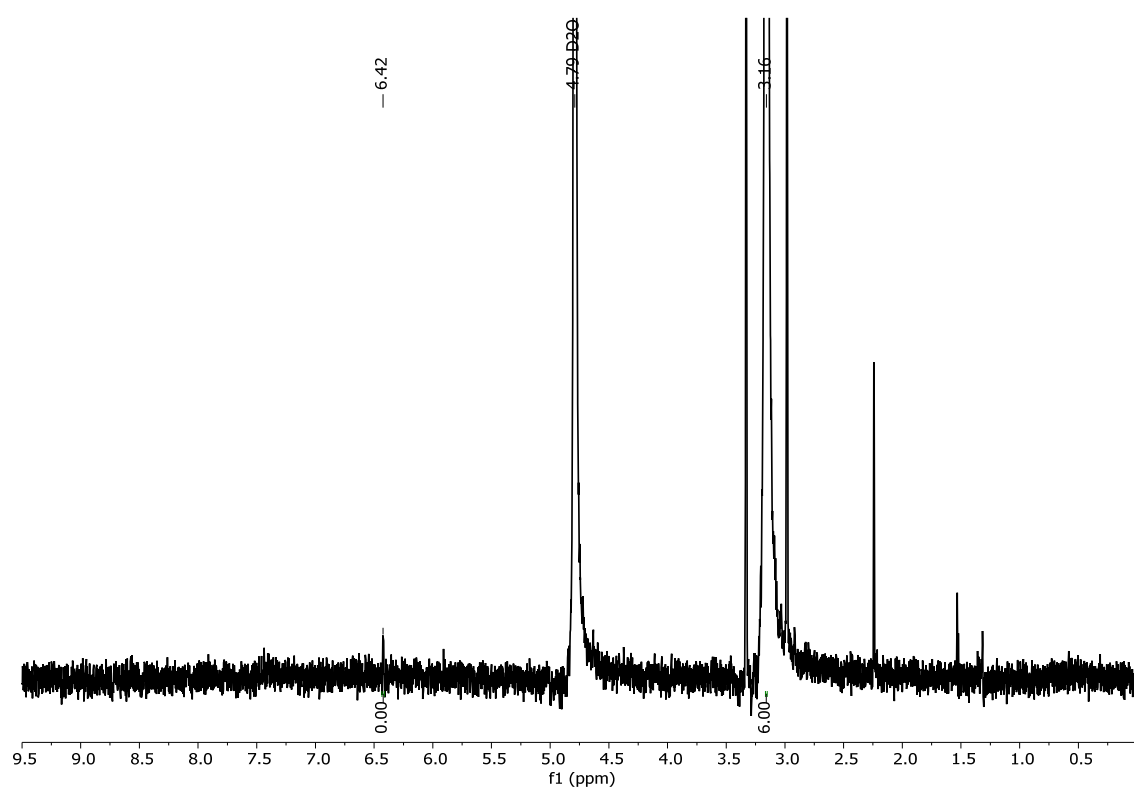
**Figure S15.**  $^1\text{H}$ -NMR spectrum of compound **1.4d** and  $\beta$ -CD.



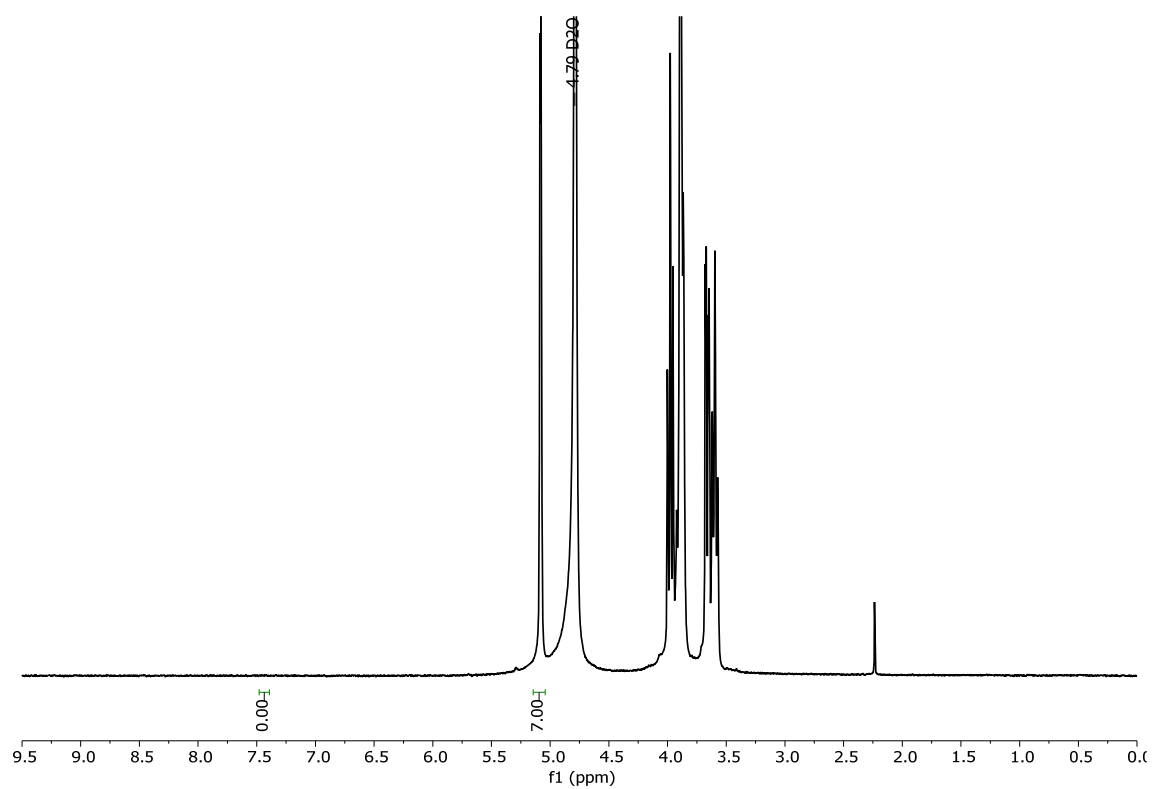
**Figure S16.**  $^1\text{H}$ -NMR spectrum of compound **1.4d** and  $\gamma$ -CD.



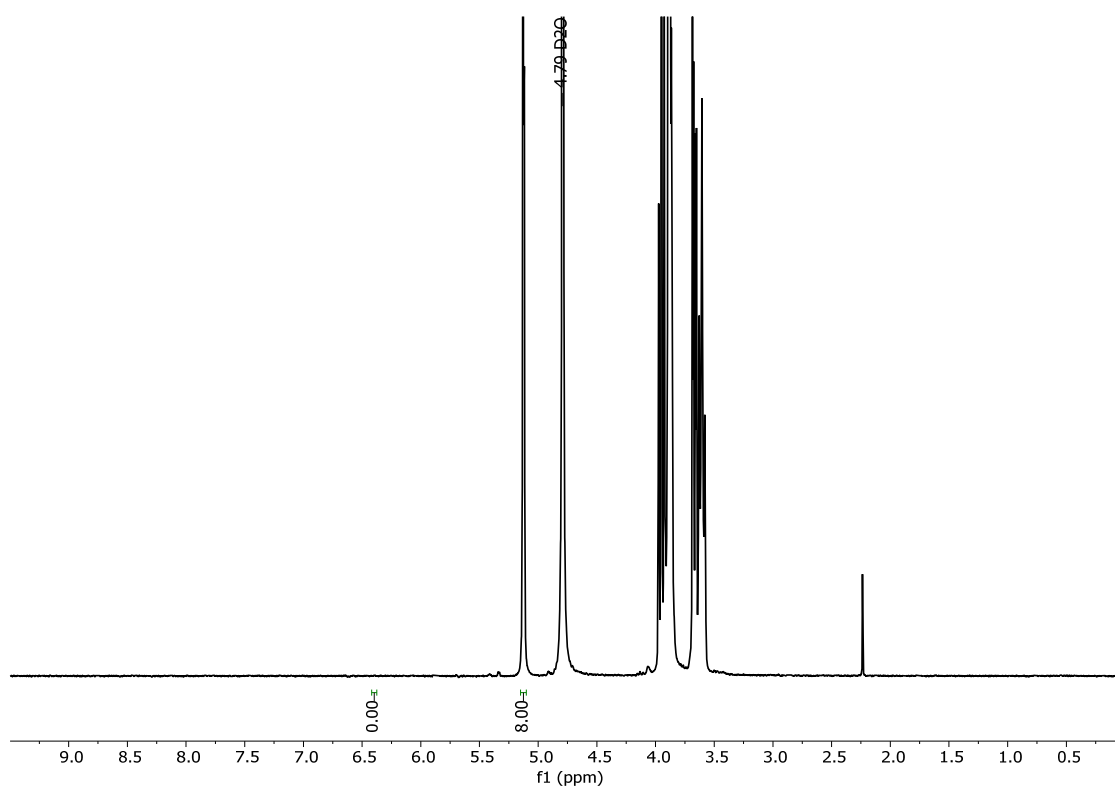
**Figure S17.** <sup>1</sup>H-NMR spectrum of compound **1.4e**.



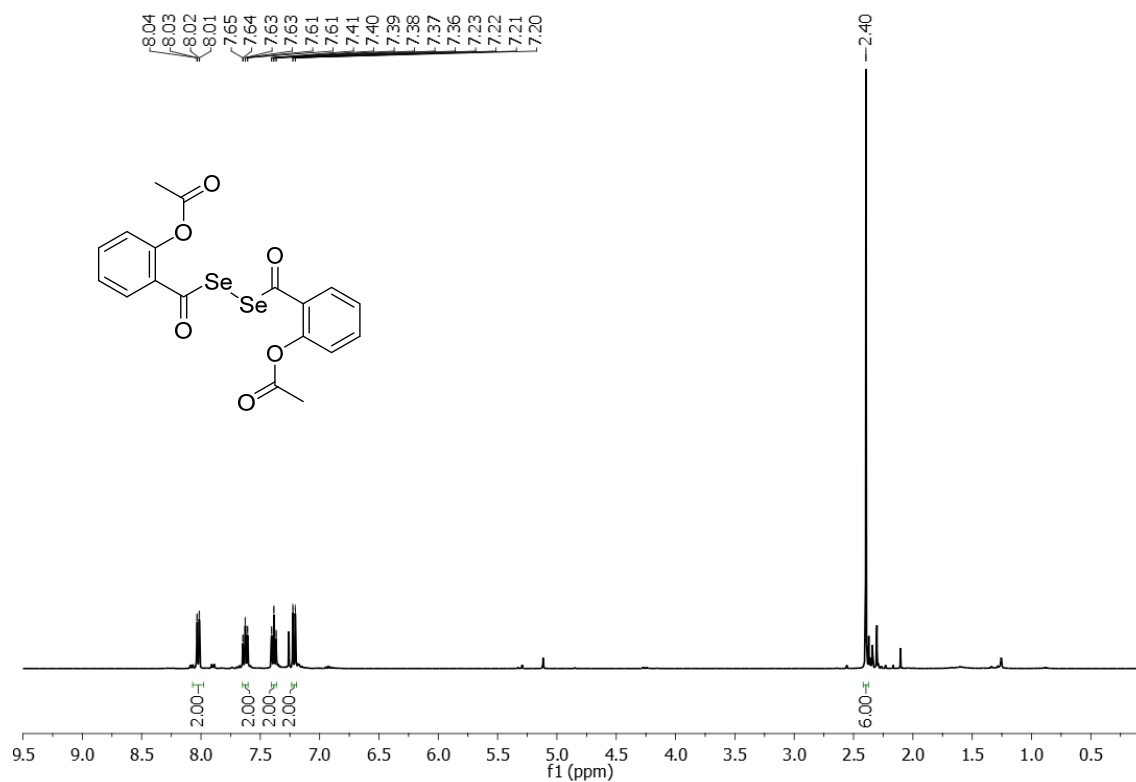
**Figure S18.** <sup>1</sup>H-NMR spectrum of compound **1.4e** and dimethyl sulfone.



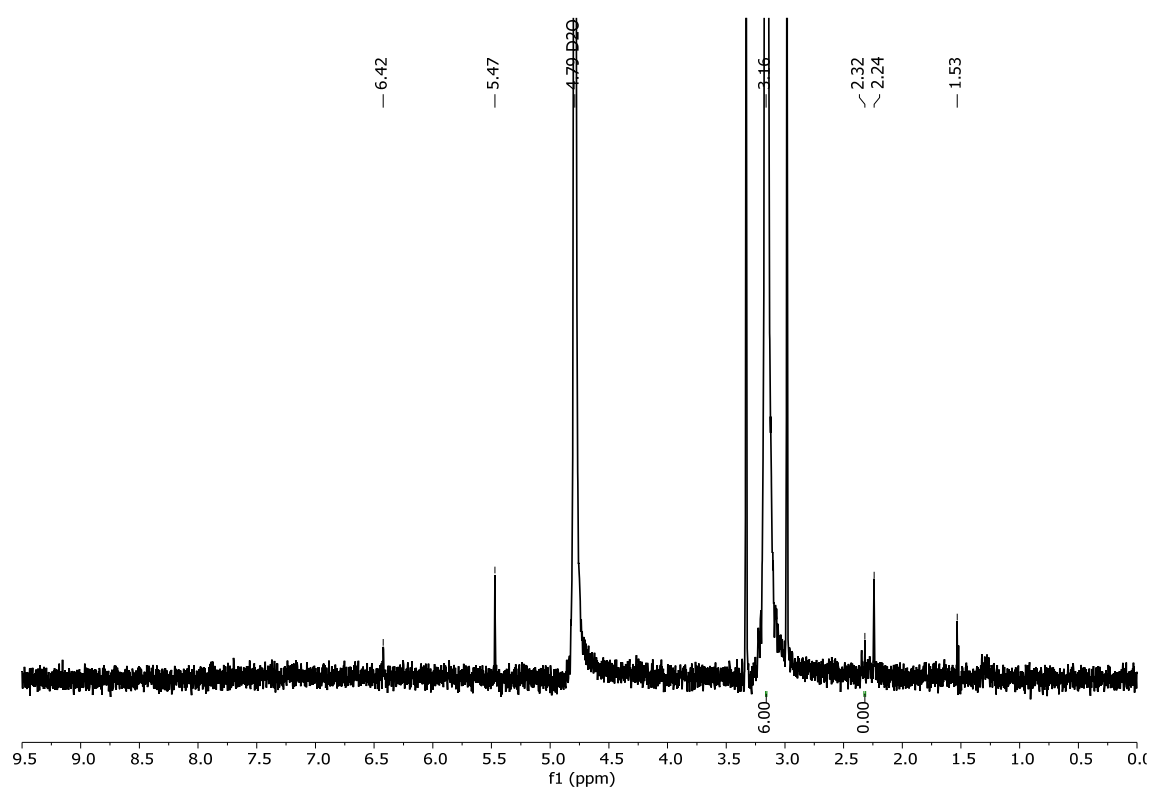
**Figure S19.** <sup>1</sup>H-NMR spectrum of compound **1.4e** and  $\beta$ -CD.



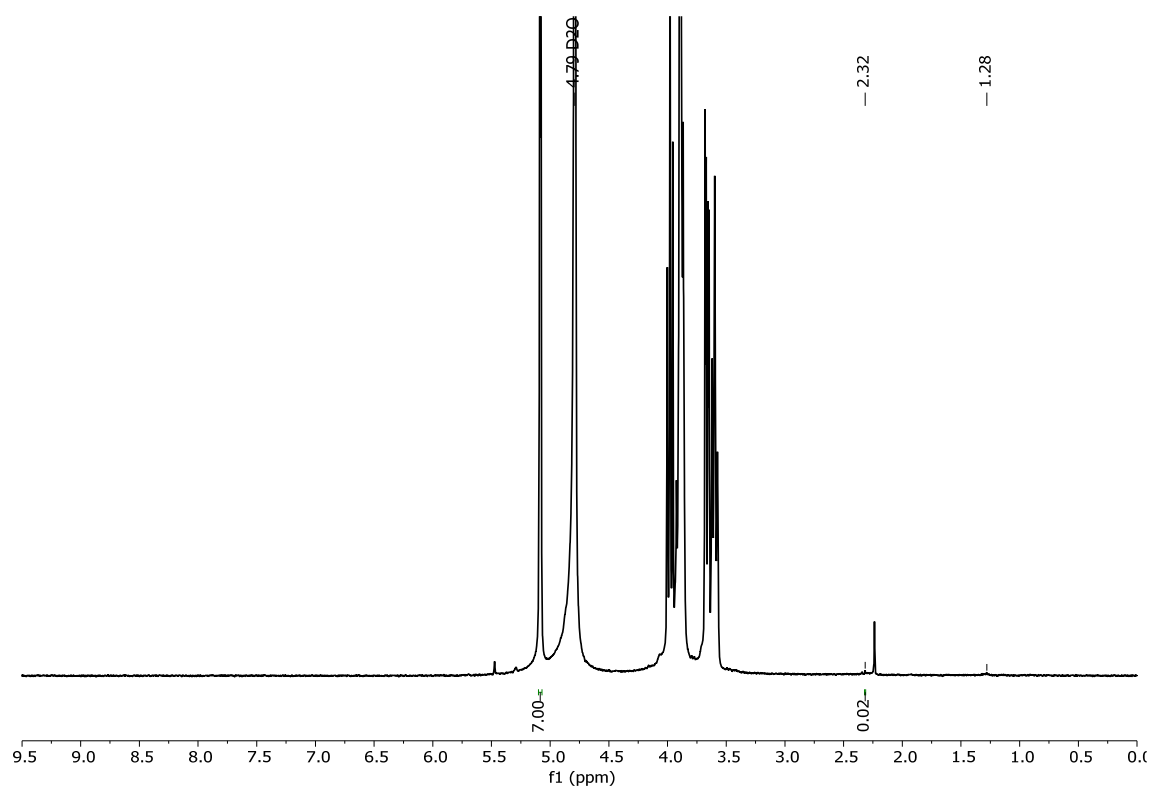
**Figure S20.** <sup>1</sup>H-NMR spectrum of compound **1.4e** and  $\gamma$ -CD.



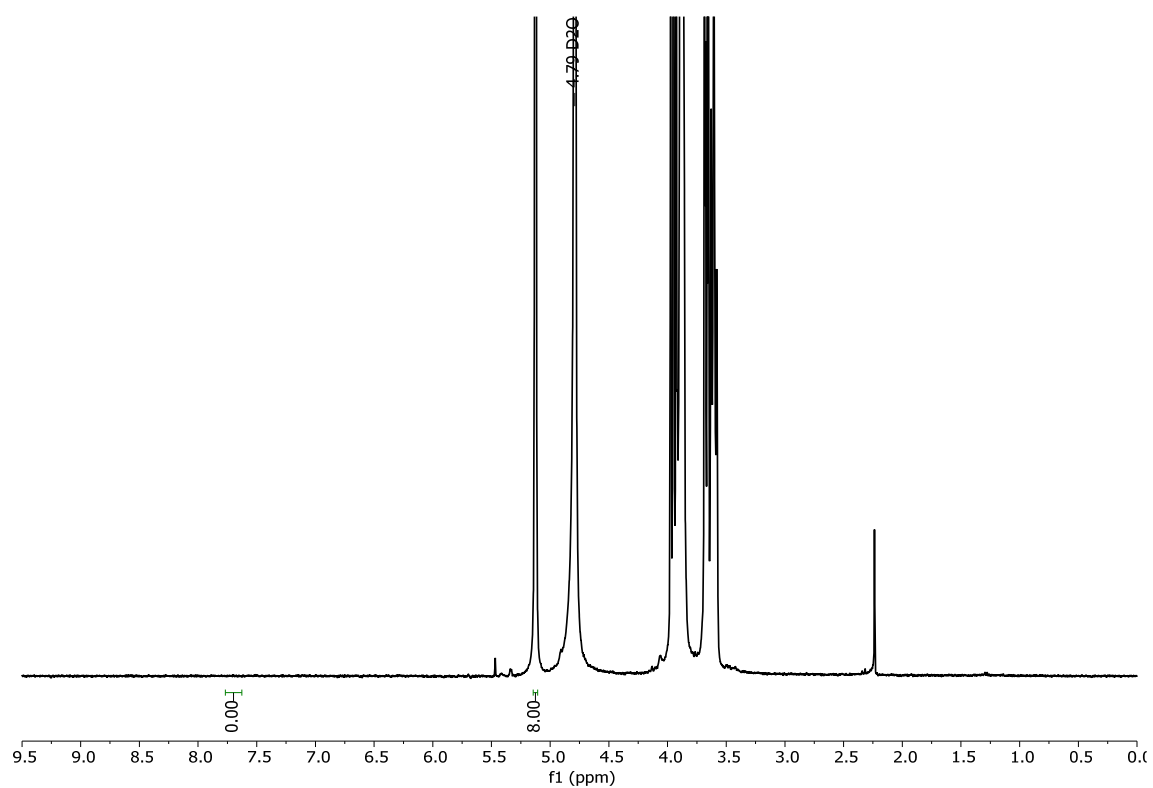
**Figure S21.** <sup>1</sup>H-NMR spectrum of compound II.1.



**Figure S22.** <sup>1</sup>H-NMR spectrum of compound II.1 and dimethyl sulfoxide.



**Figure S23.** <sup>1</sup>H-NMR spectrum of compound II.1 and β-CD.



**Figure S24.** <sup>1</sup>H-NMR spectrum of compound II.1 and γ-CD.

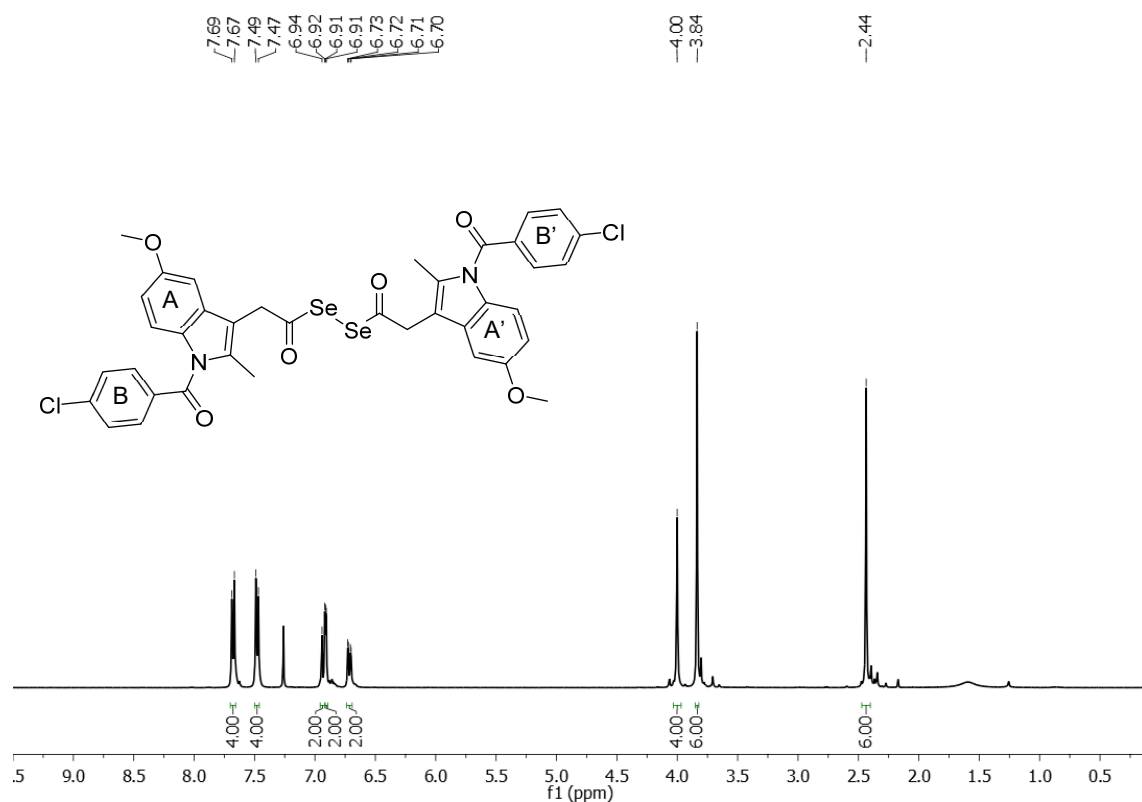


Figure S25.  $^1\text{H}$ -NMR spectrum of compound II.2.

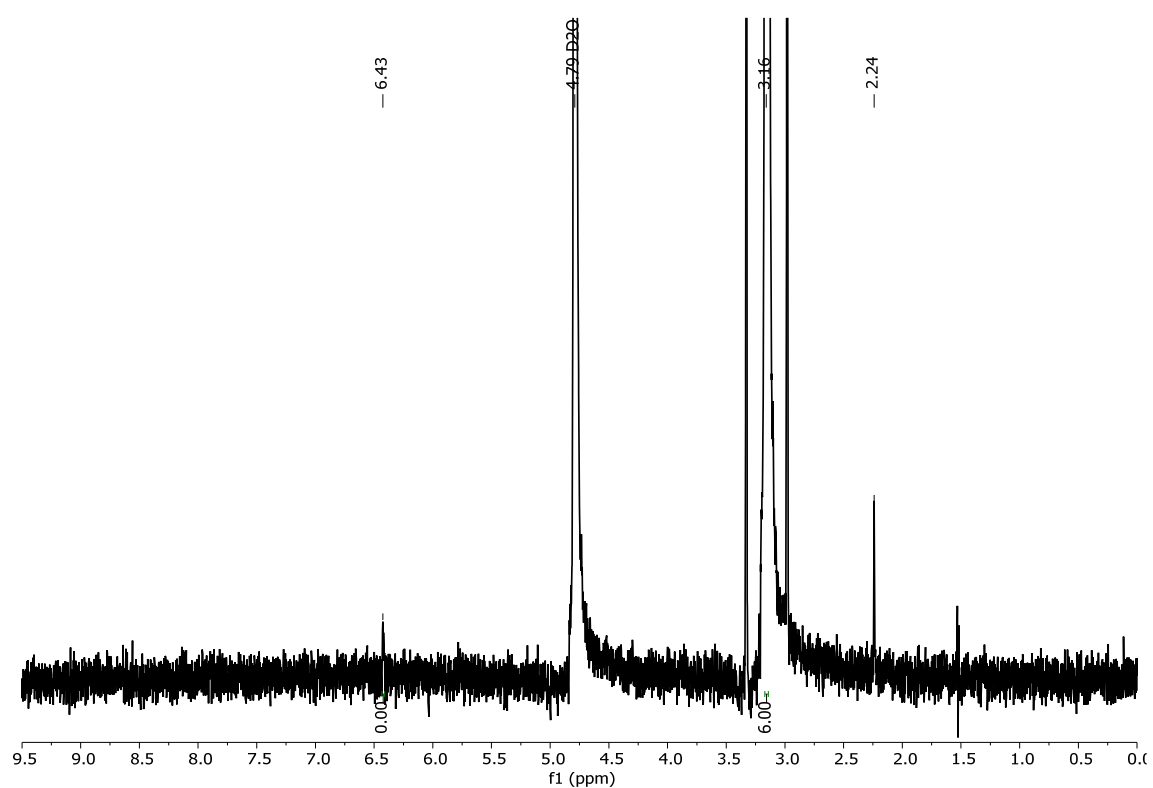
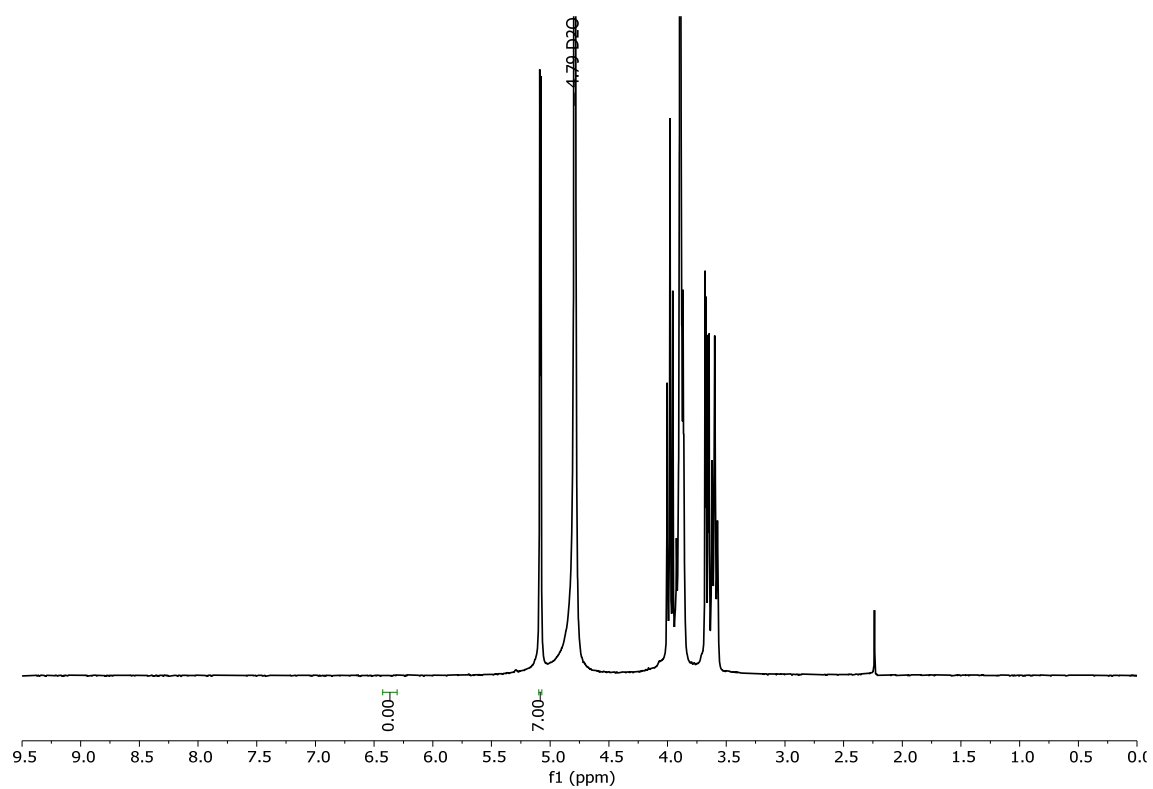
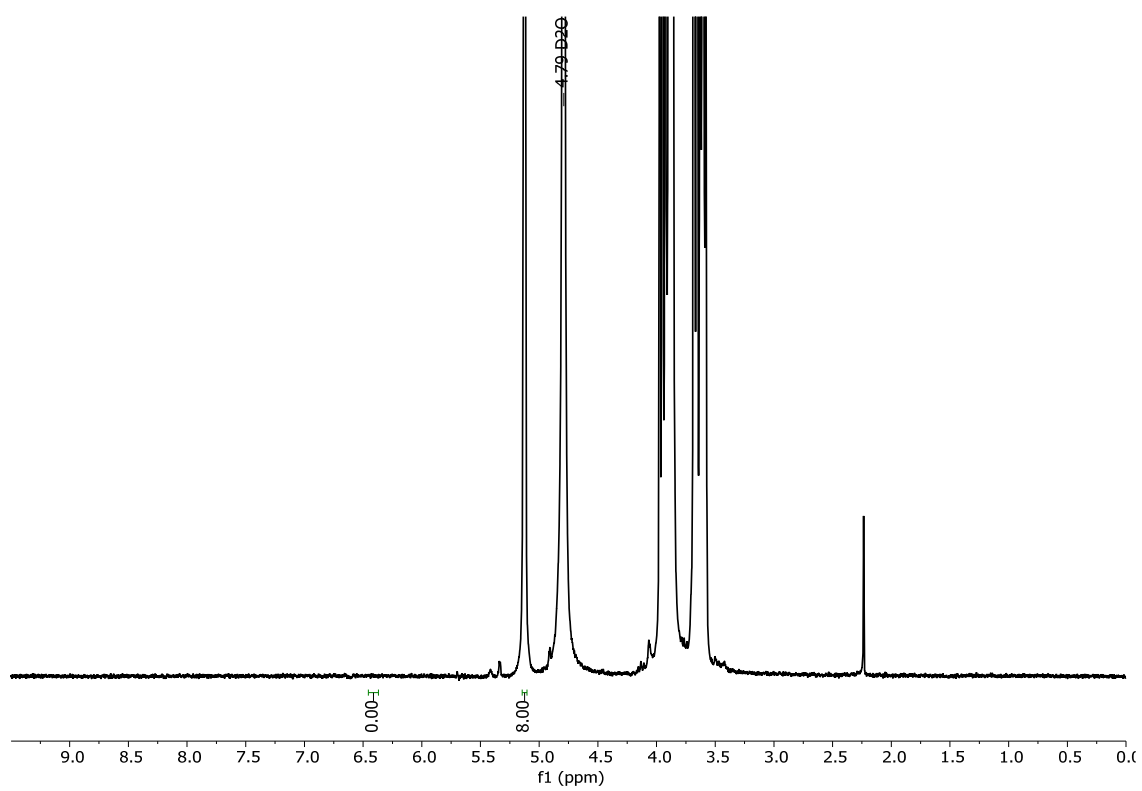


Figure S26.  $^1\text{H}$ -NMR spectrum of compound II.2 and dimethyl sulfone.



**Figure S27.**  $^1\text{H}$ -NMR spectrum of compound **II.2** and  $\beta$ -CD.



**Figure S28.**  $^1\text{H}$ -NMR spectrum of compound **II.2** and  $\gamma$ -CD.

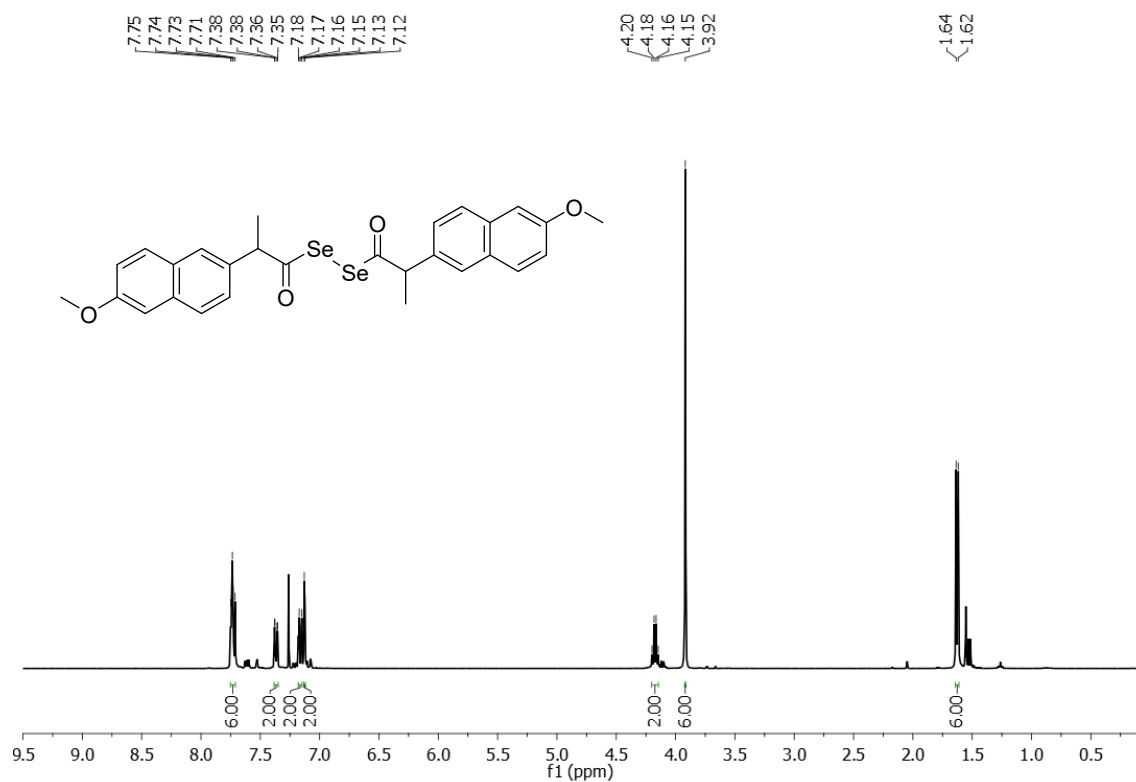


Figure S29. <sup>1</sup>H-NMR spectrum of compound II.3.

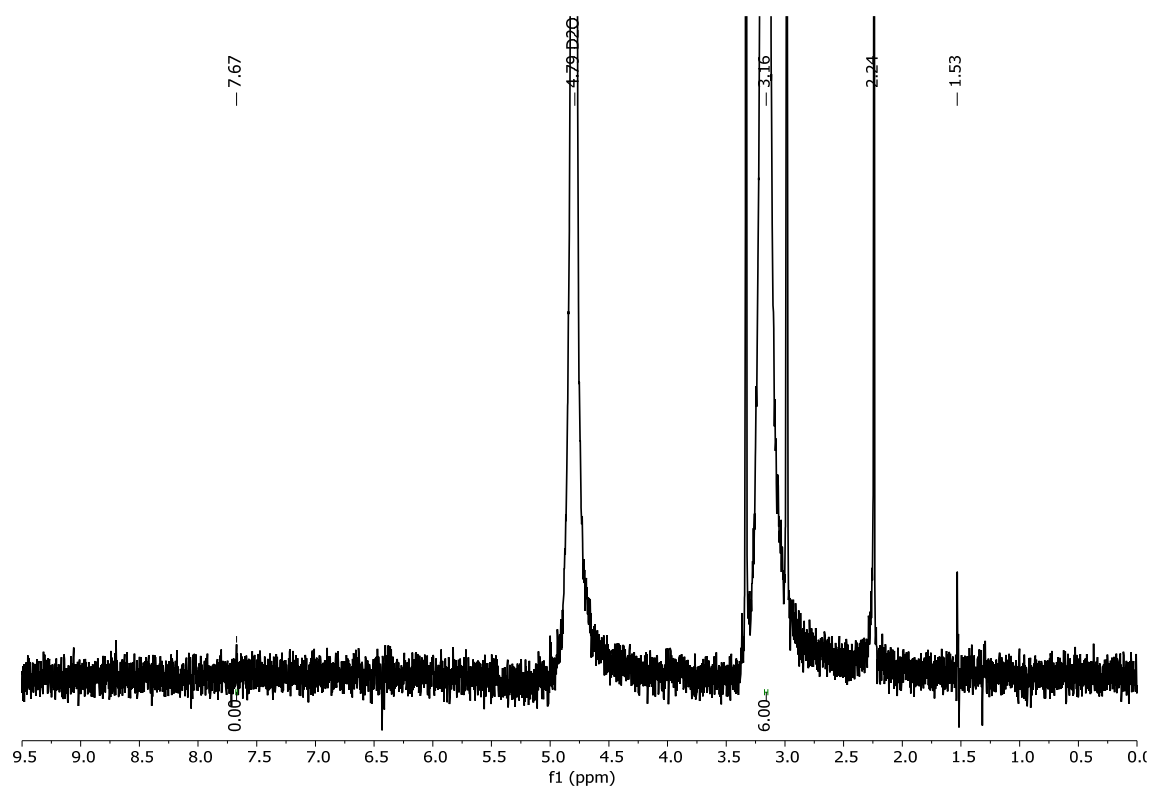
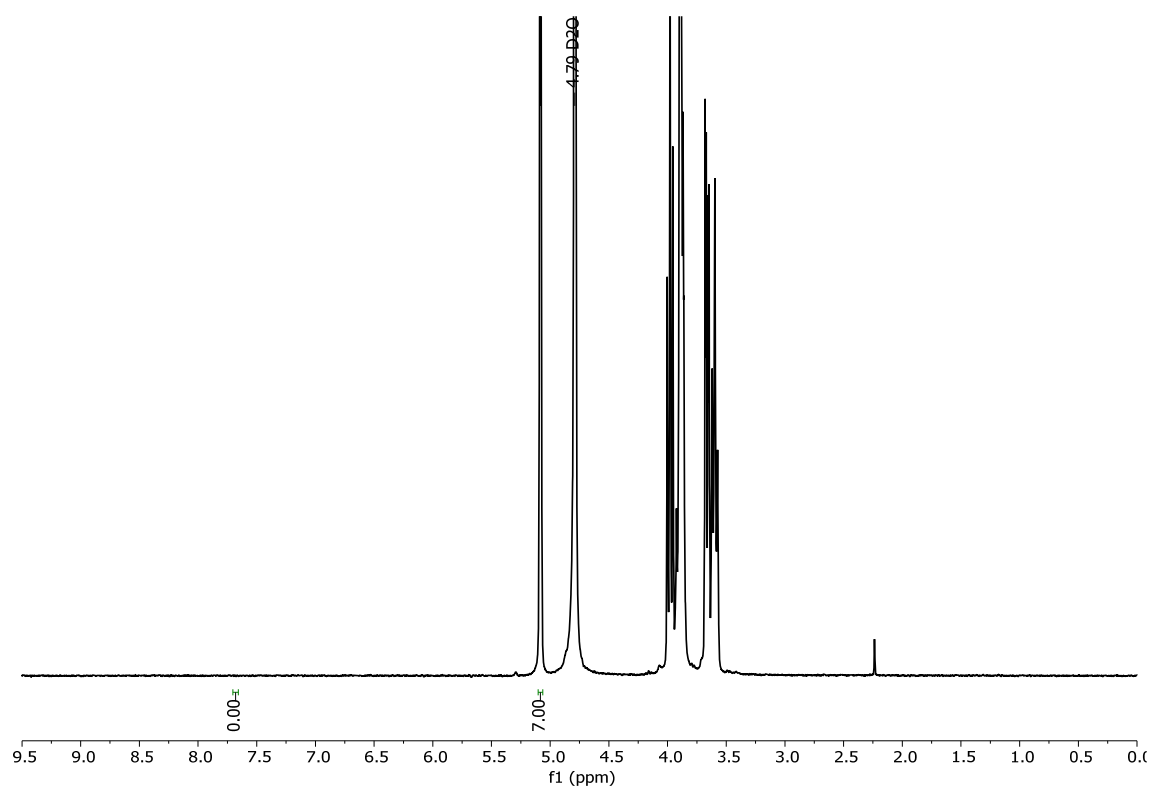
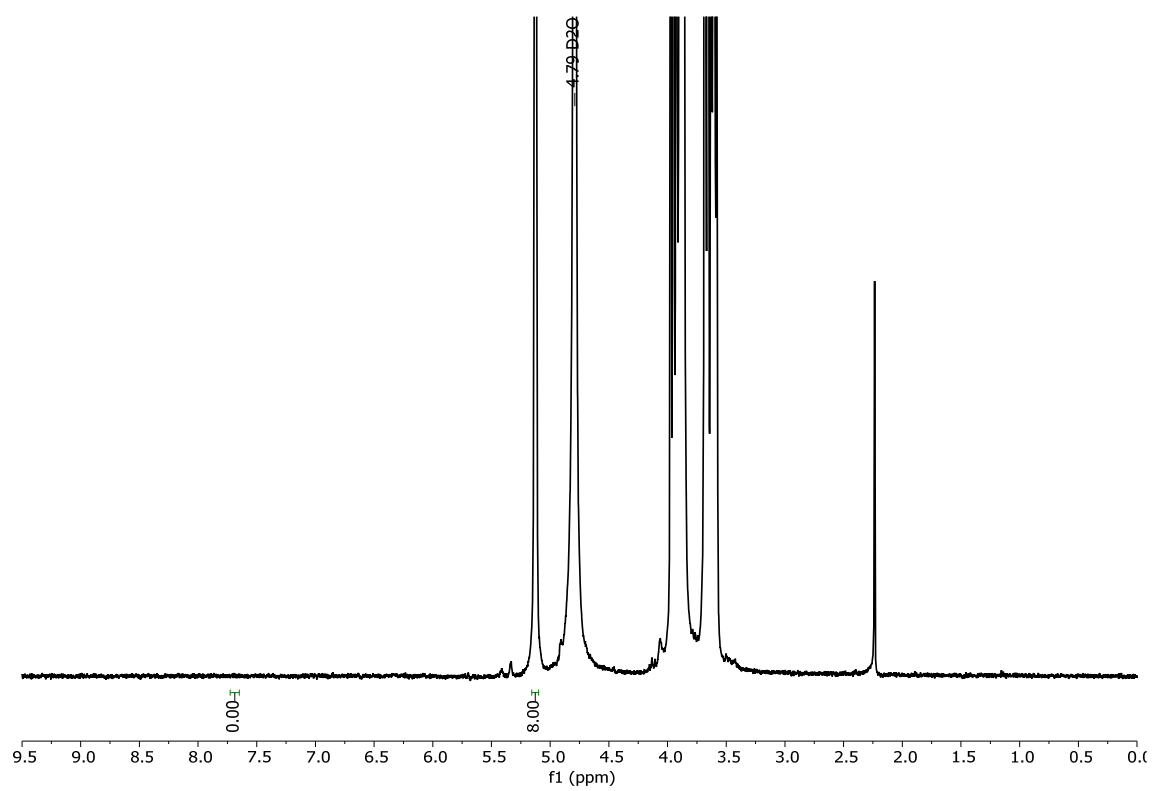


Figure S30. <sup>1</sup>H-NMR spectrum of compound II.3 and dimethyl sulfoxide.

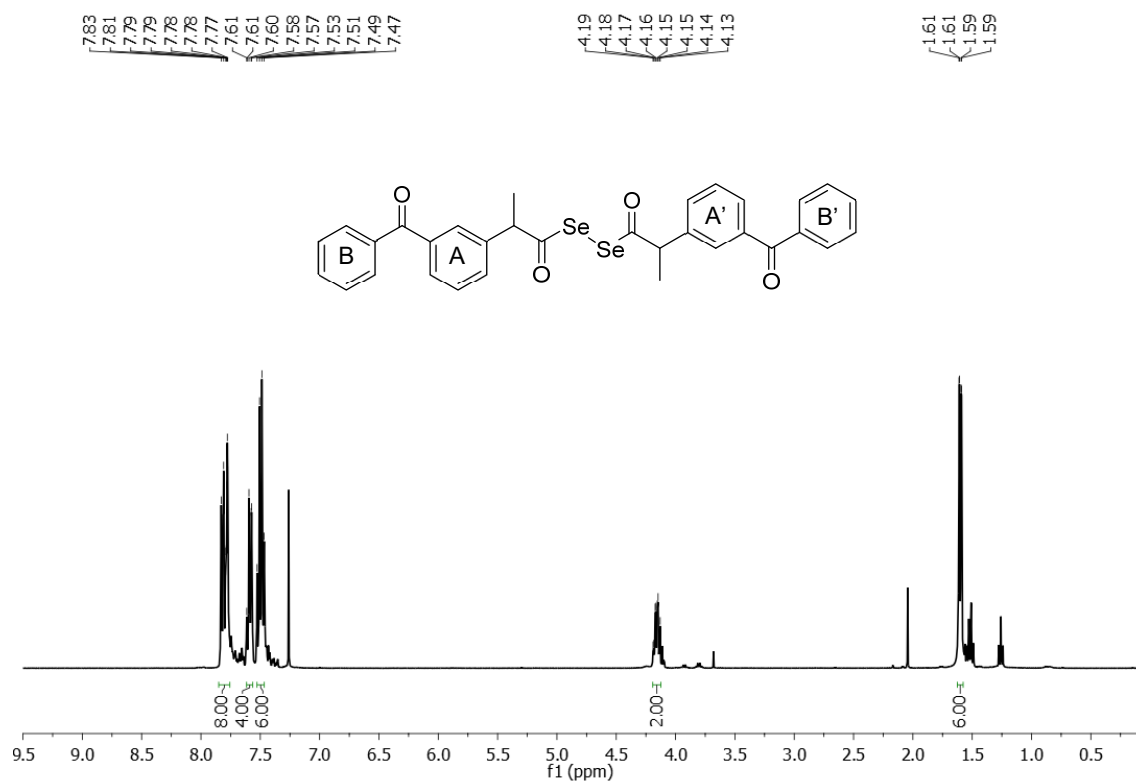




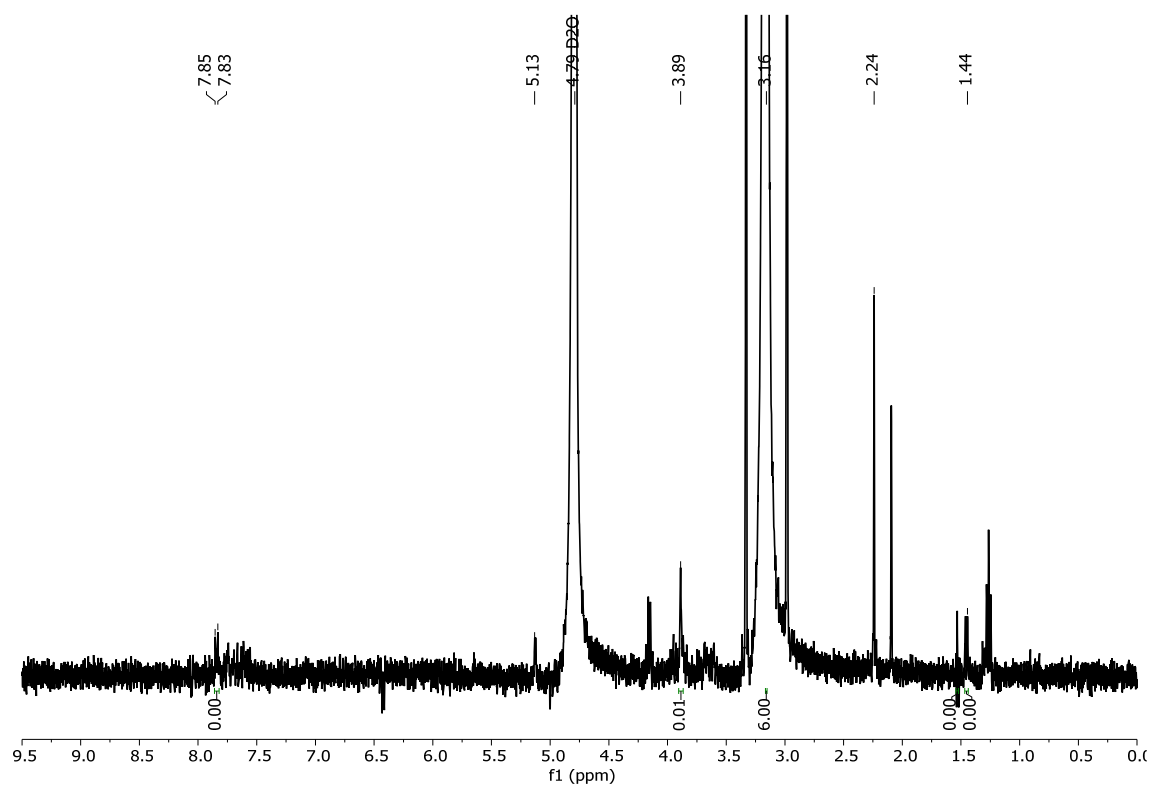
**Figure S31.** <sup>1</sup>H-NMR spectrum of compound II.3 and β-CD.



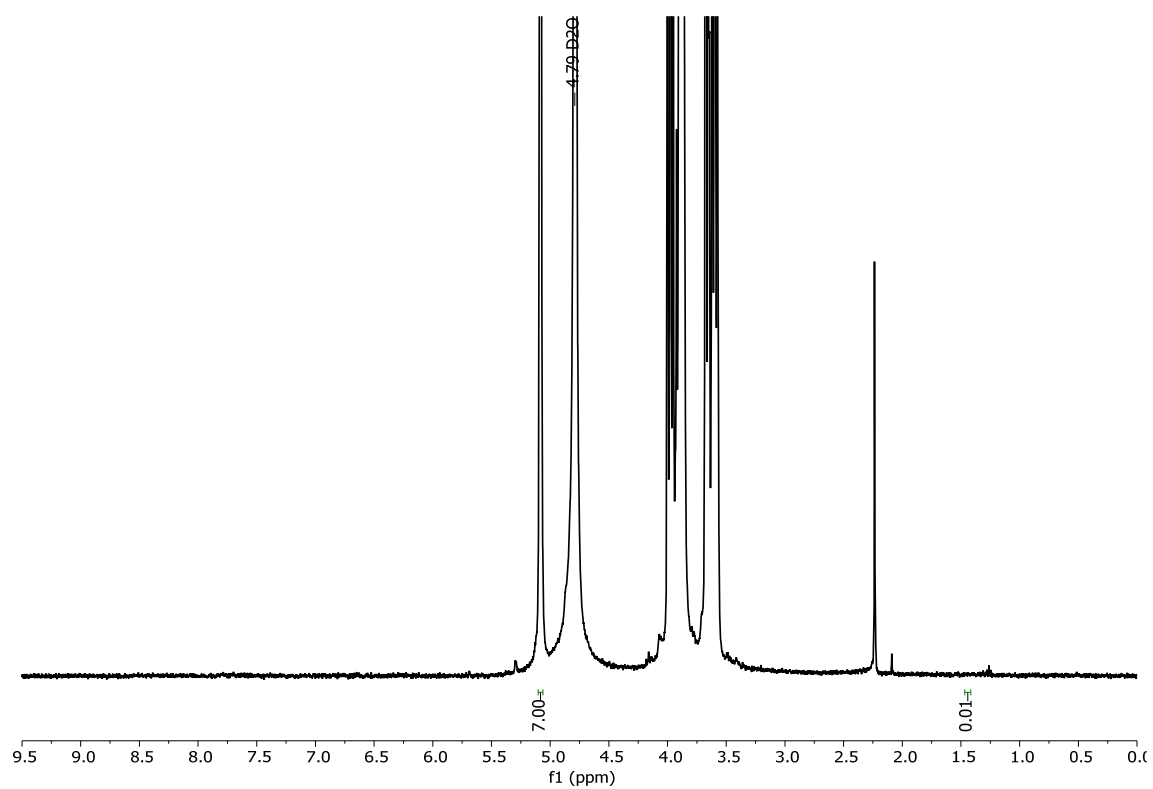
**Figure S32.** <sup>1</sup>H-NMR spectrum of compound II.3 and γ-CD.



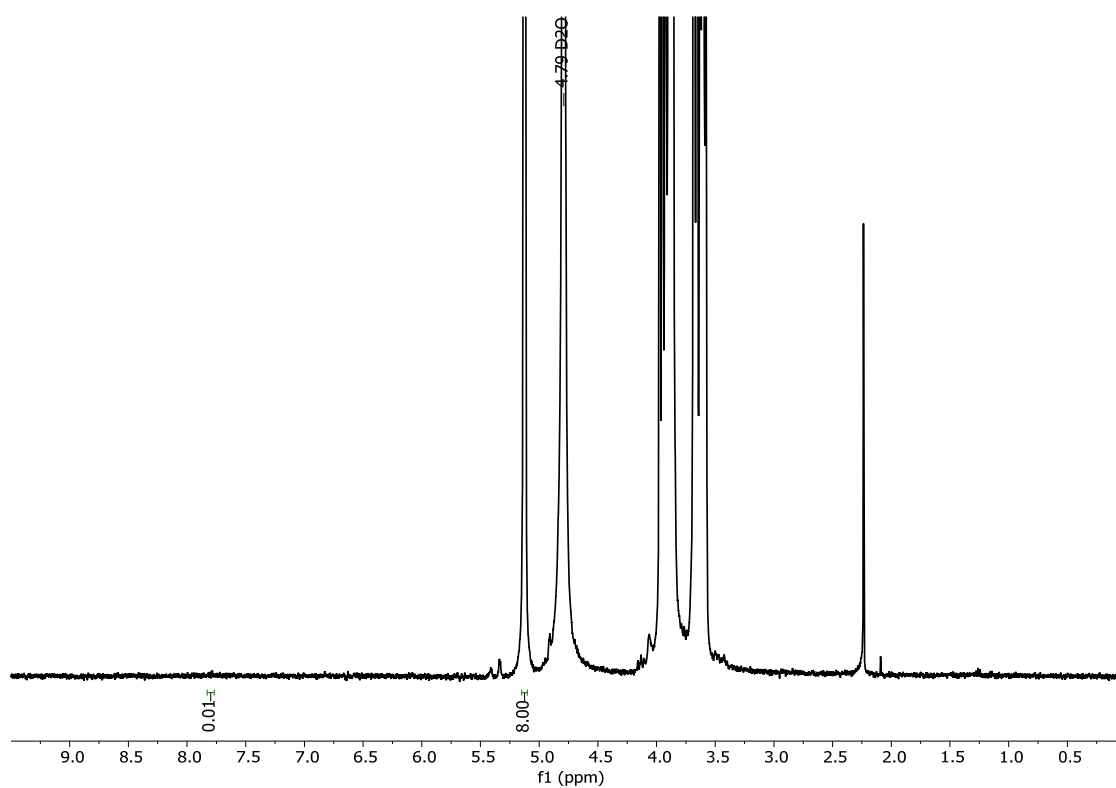
**Figure S33.**  $^1\text{H-NMR}$  spectrum of compound II.4.



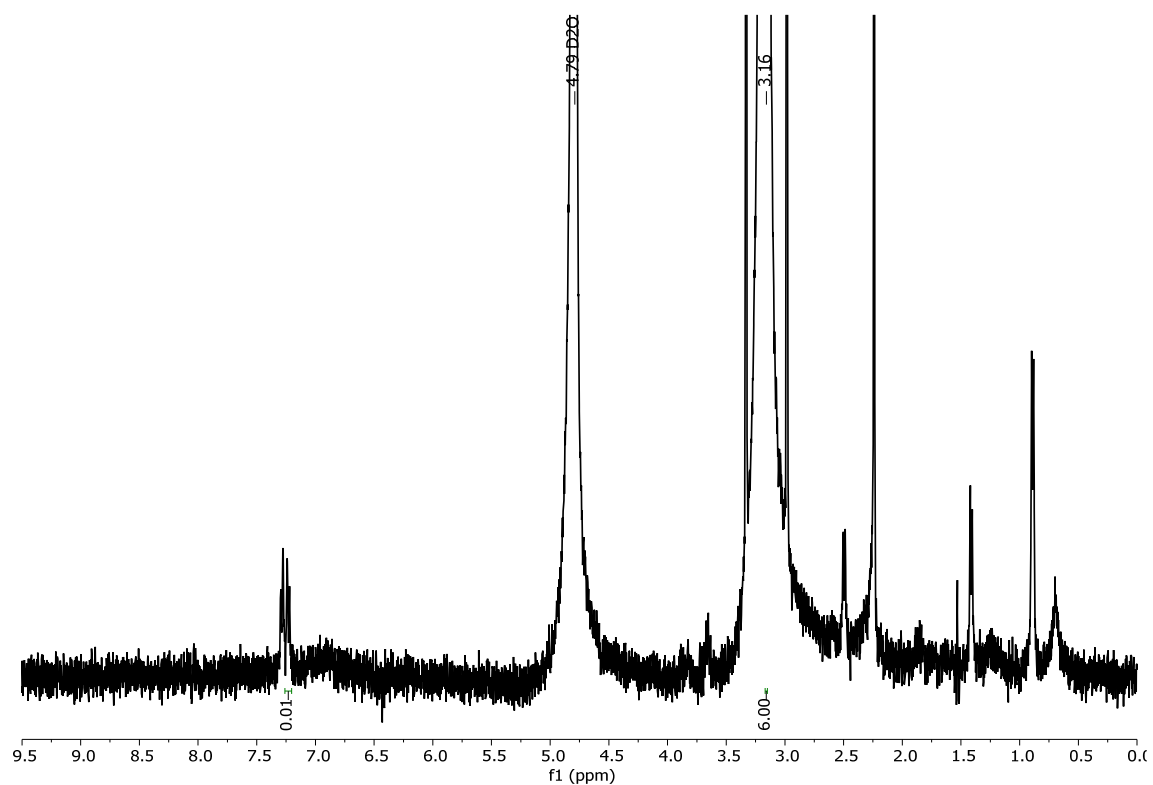
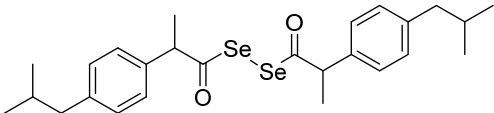
**Figure S34.**  $^1\text{H-NMR}$  spectrum of compound II.4 and dimethyl sulfone.



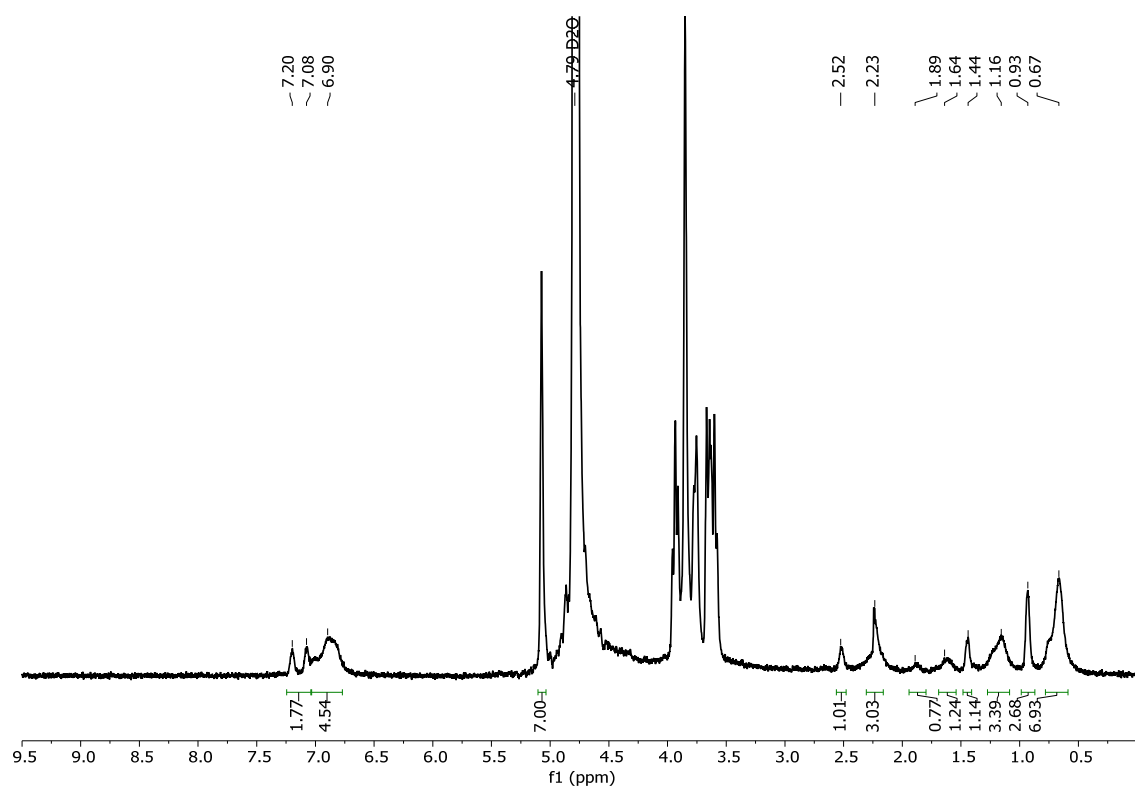
**Figure S35.**  $^1\text{H}$ -NMR spectrum of compound **II.4** and  $\beta$ -CD.



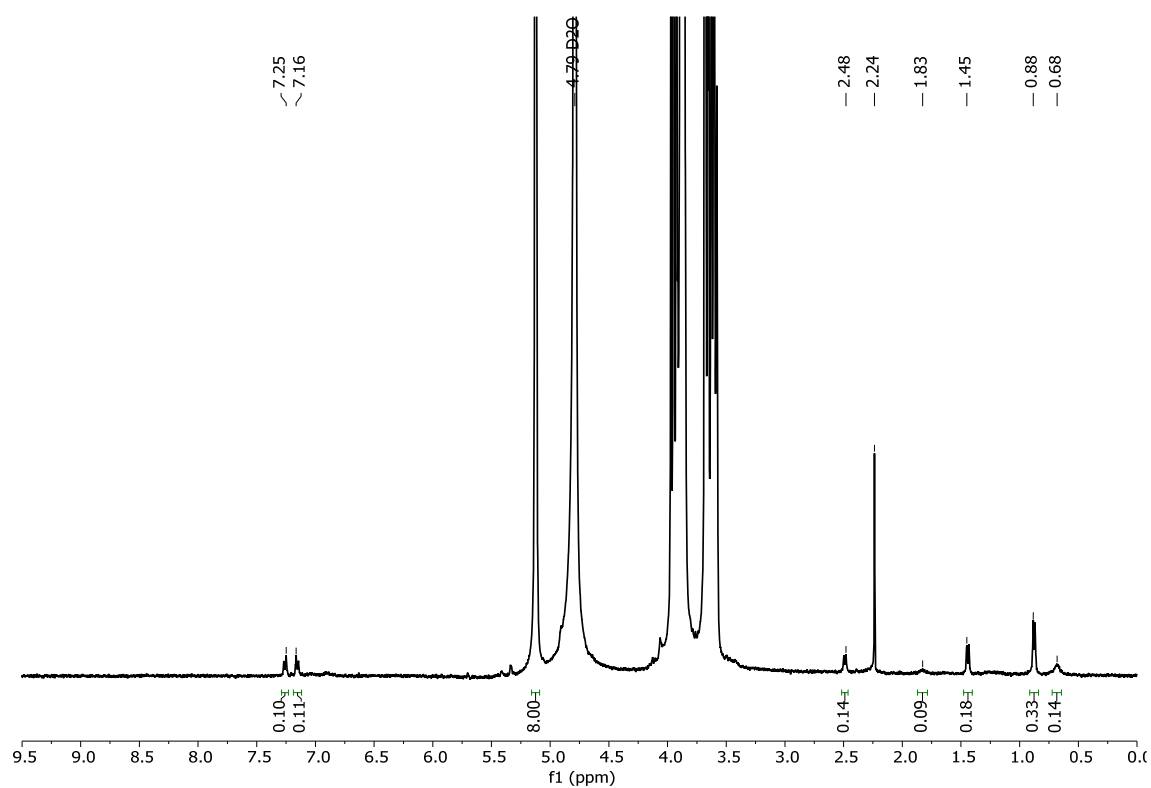
**Figure S36.**  $^1\text{H}$ -NMR spectrum of compound **II.4** and  $\gamma$ -CD.



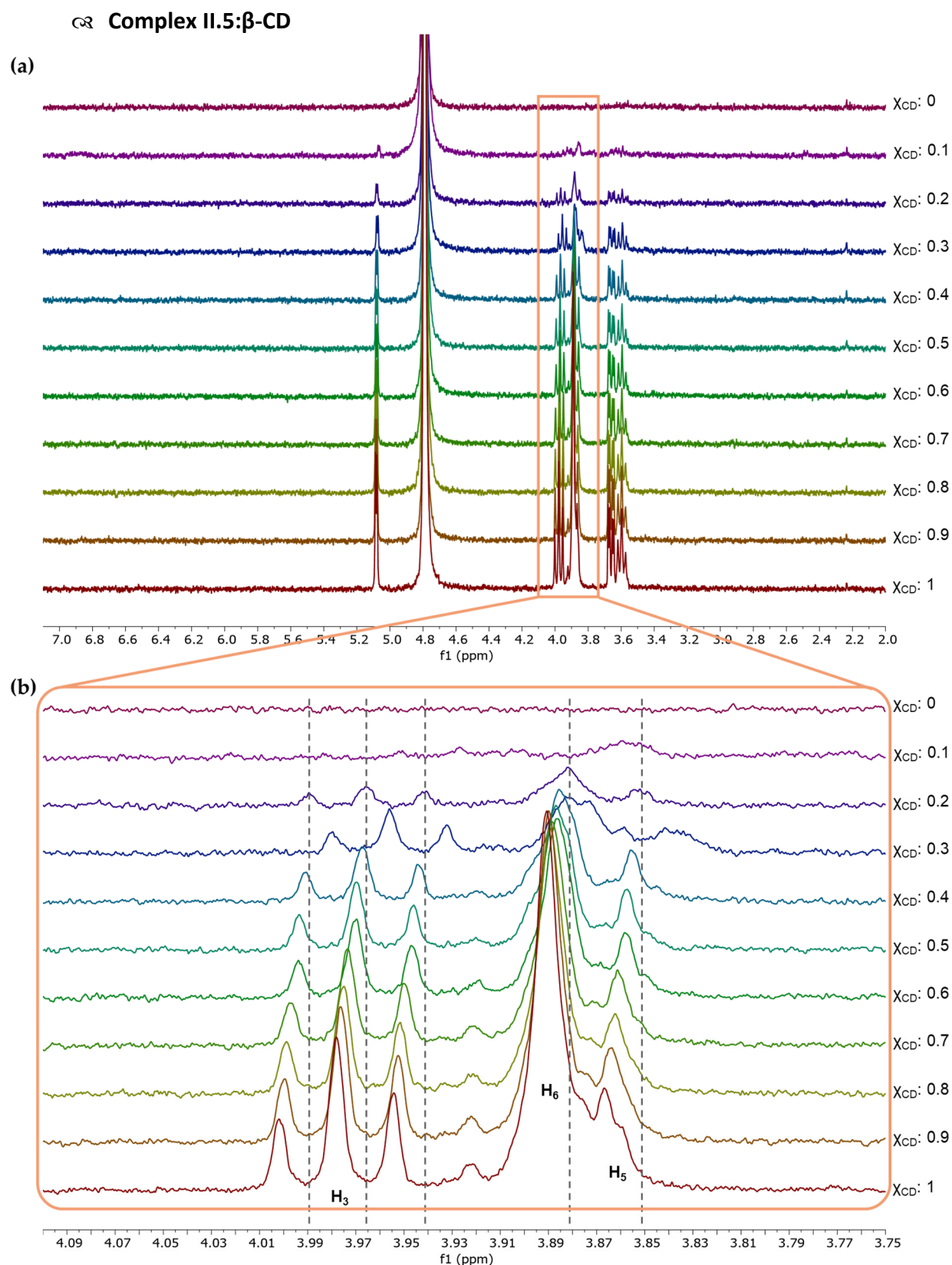
**Figure S38.**  $^1\text{H}$ -NMR spectrum of compound **II.5** and dimethyl sulfone.



**Figure S39.** <sup>1</sup>H-NMR spectrum of compound II.5 and β-CD.



**Figure S40.** <sup>1</sup>H-NMR spectrum of compound II.5 and γ-CD.



**Figure S41.** (a)  $^1\text{H}$ -NMR spectra for different molar fractions of the complex II.5:β-CD and (b) expansion of the region including protons  $H_3$ ,  $H_5$  and  $H_6$  of the β-CD.

✎ Computational data

**Table S1.** Scores for best poses with  $\beta$ -CD (London GBVI, explicit solvent).

Ref.	S	rmsd_refine	E_score1	E_refine	E_score2
I.3e	-5.7072	0.9549	-9.1928	-28.8446	-5.7072
I.4a	-6.5707	1.3715	-11.1362	-35.2667	-6.5707
I.4b	-6.6023	2.5629	-9.1989	-37.9295	-6.6023
I.4d	-6.3956	2.1327	-13.9270	-32.9405	-6.3956
I.4e	-6.6008	2.0304	-9.4502	-36.2130	-6.6008
II.1	-6.3968	2.1026	-8.5649	-30.1874	-6.3968
II.2	-7.5321	3.3643	-7.8035	-42.4309	-7.5321
II.3	-6.5140	2.3443	-7.5844	-39.5321	-6.5140
II.4	-6.6059	1.4075	-7.6007	-41.1813	-6.6059
II.5	-6.5295	2.3124	-7.6958	-37.8857	-6.5295

**Table S2.** Scores for best poses with  $\gamma$ -CD (London GBVI, explicit solvent).

Ref.	S	rmsd_refine	E_score1	E_refine	E_score2
I.3e	-8.0412	1.9909	-3.1866	-33.4640	-8.0412
I.4a	-9.6127	2.2584	-1.8757	-34.6887	-9.6127
I.4b	-8.8817	1.9890	-1.9153	-32.3470	-8.8817
I.4d	-8.8520	4.6771	-2.2712	-35.2892	-8.8520
I.4e	-9.1430	4.9243	-2.1714	-36.6787	-9.1430
II.1	-8.1714	1.2808	-3.8911	-35.5261	-8.1714
II.2	-10.1487	1.6912	1.8735	-42.3182	-10.1487
II.3	-8.9557	2.0750	0.2874	-38.5811	-8.9557
II.4	-9.1211	2.6151	-0.5199	-42.0503	-9.1211
II.5	-7.9440	2.0826	2.5007	-34.7207	-7.9440

**Table S3.** Energy values for best poses of selected compounds (London GBVI, explicit solvent).

Ref. complex	E all
$\beta$ -CD	
I3e_best_solvent	-257.77
II5_01_best_solvent	-465.87
II5_02_best_solvent	-463.43
$\gamma$ -CD	
I3e_best_solvent	-293.76
II5_01_best_solvent	-508.33
II5_02_best_solvent	-507.18