

SUPPLEMENTARY MATERIAL

for

Bis(2,6-di(pyridin-2-yl)pyridin-4-yl)-6,6'-(1,2-diselanediy)dihexanoate

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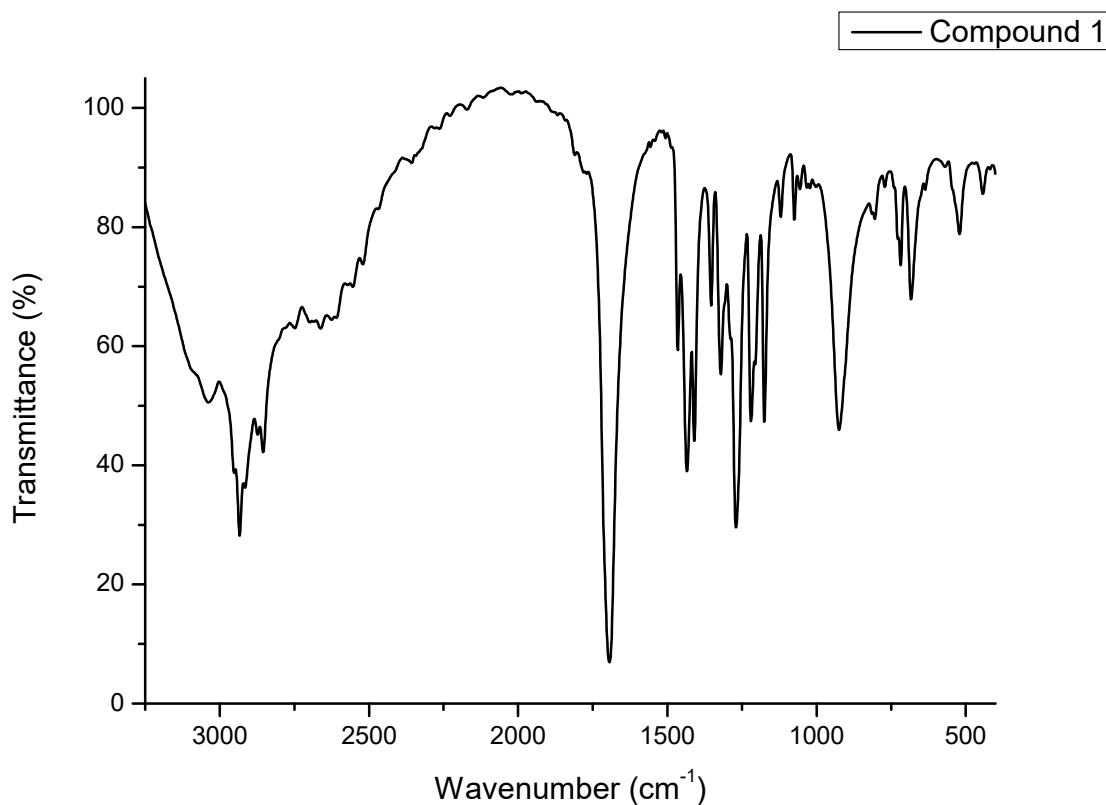


Figure S1. FT-IR spectrum of compound 1

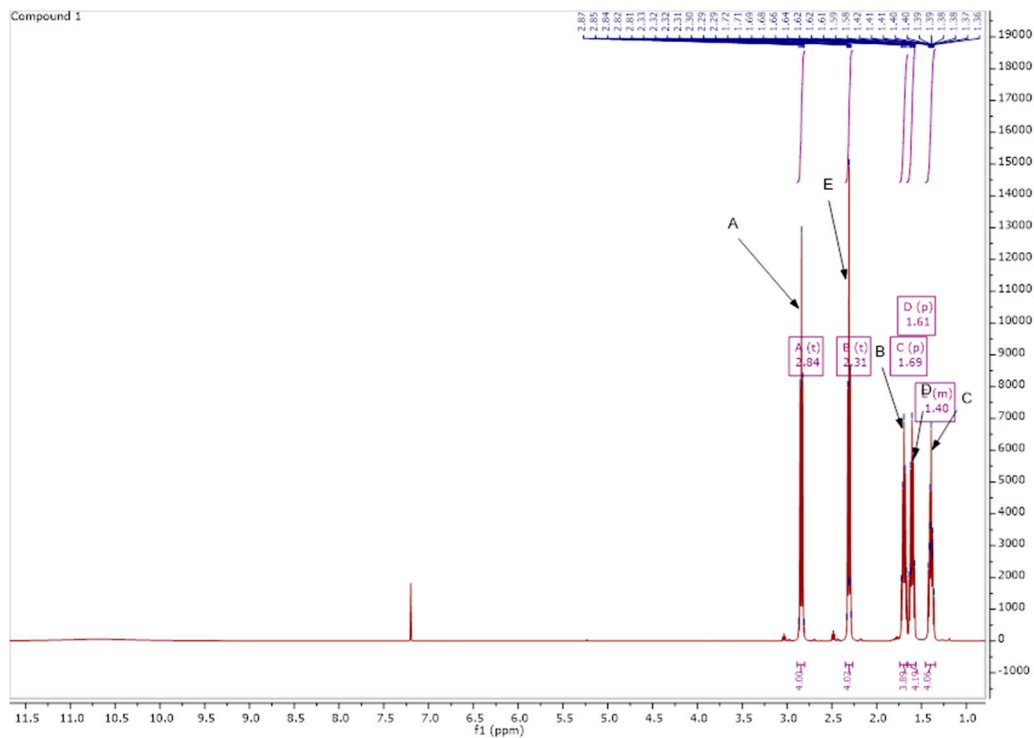


Figure S2. ^1H -NMR spectrum of compound 1 recorded in CDCl_3

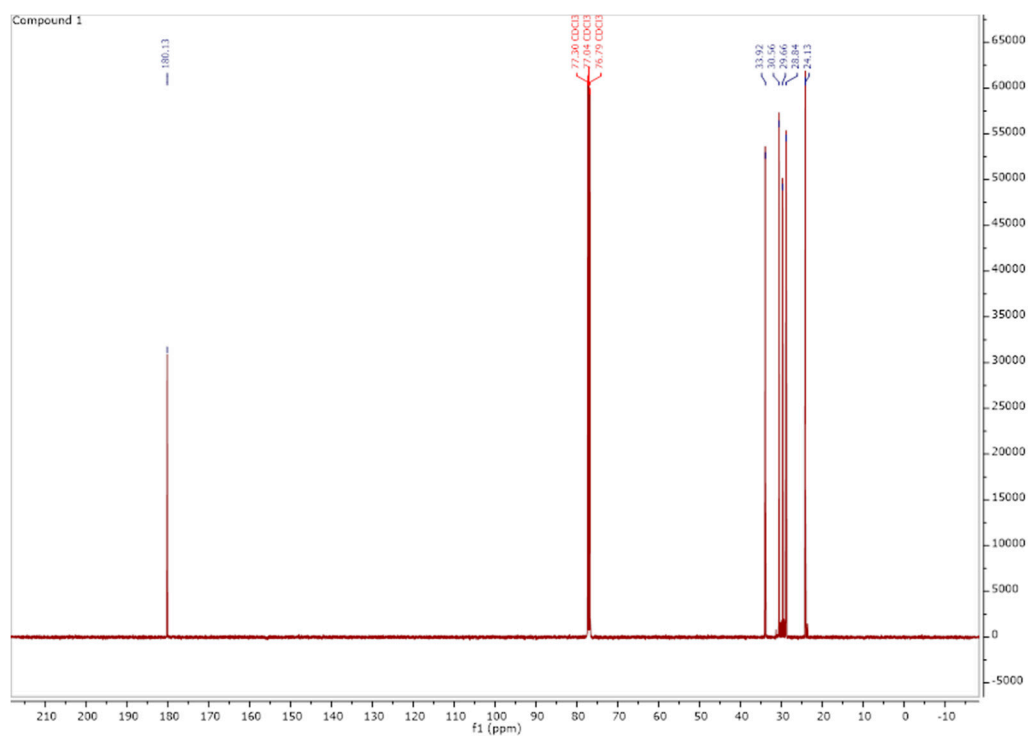


Figure S3. ^{13}C -NMR spectrum of compound 1 recorded in CDCl_3

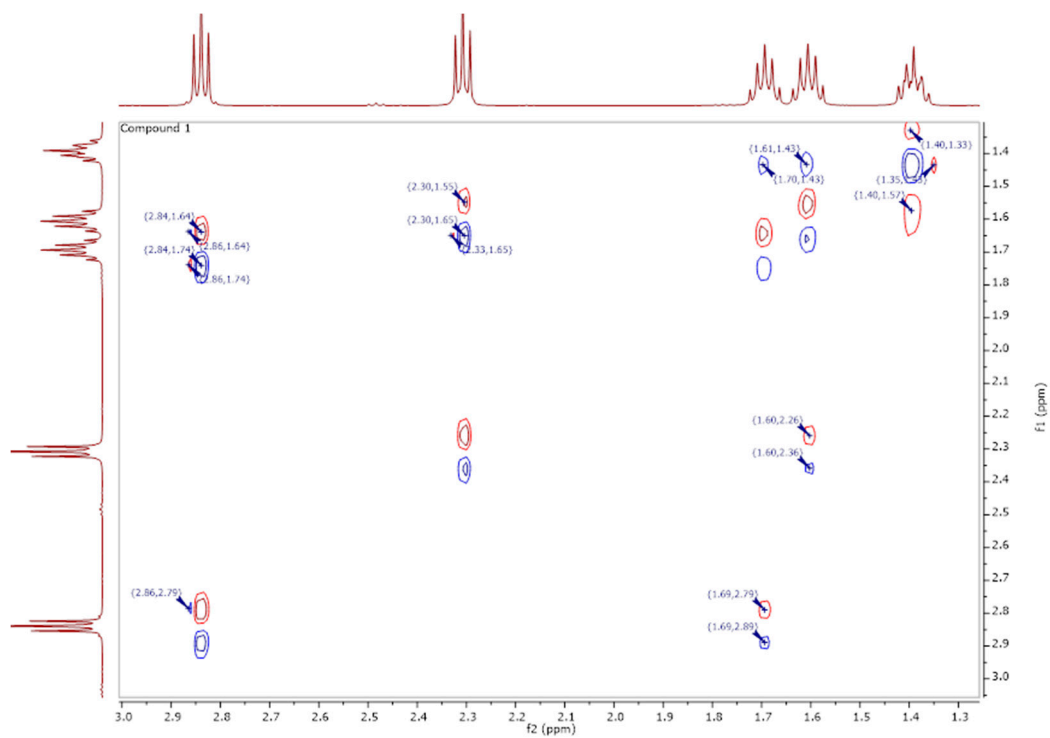


Figure S4. ^1H - ^1H (COSY) spectrum of compound 1 recorded in CDCl_3

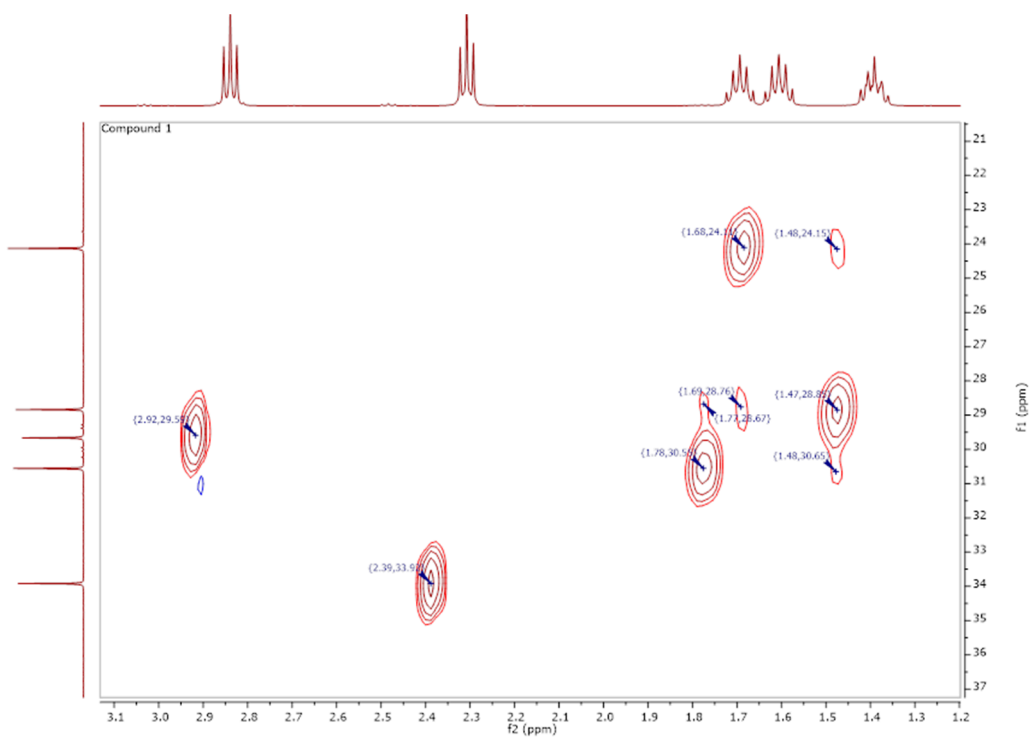


Figure S5. HSQC spectrum of compound 1 recorded in CDCl_3

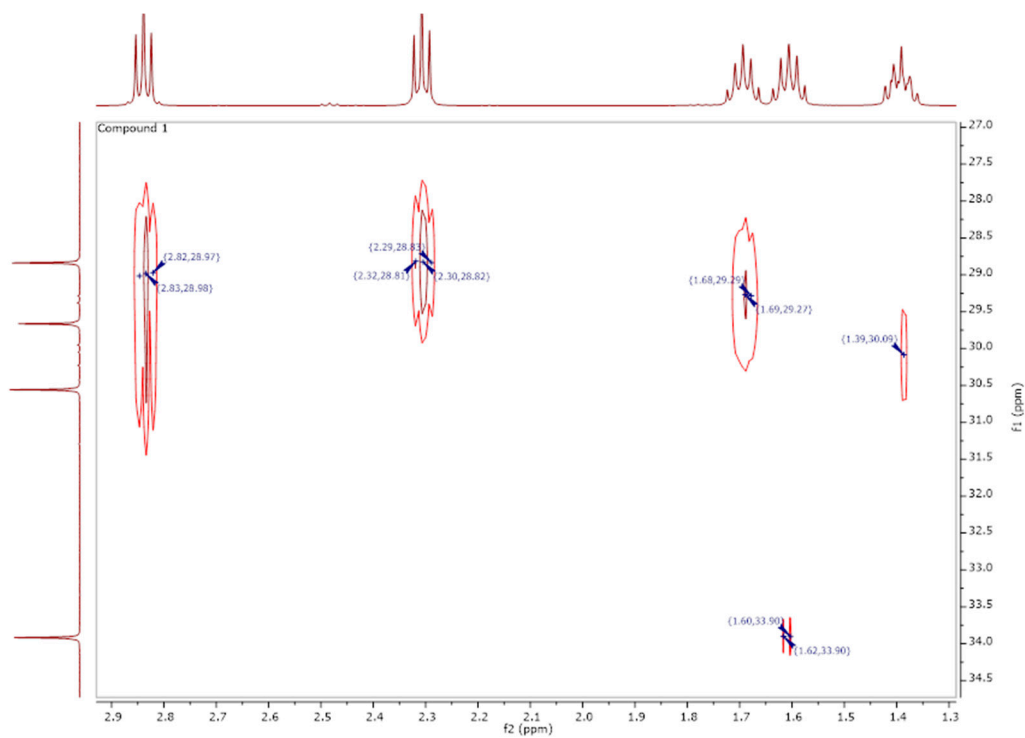


Figure S6. HMBC spectrum of compound 1 recorded in CDCl_3

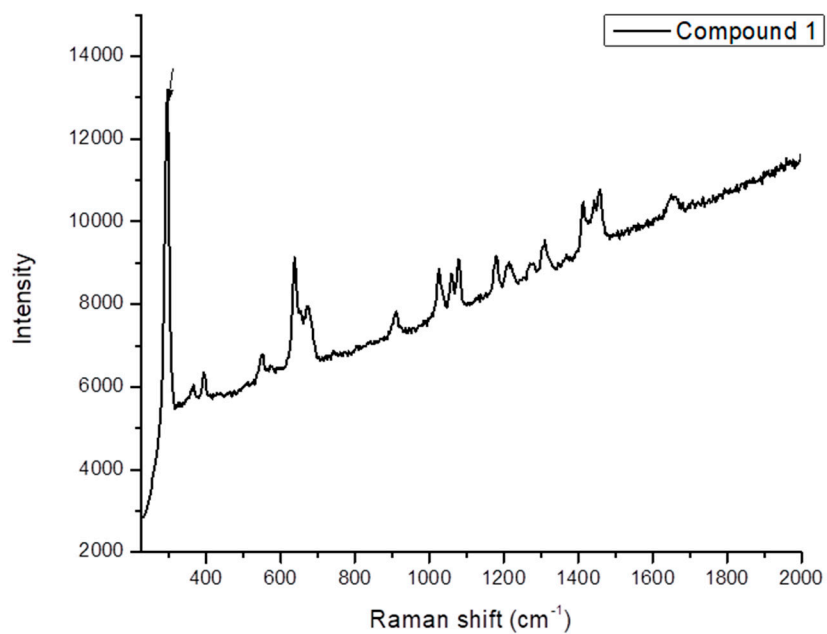


Figure S7. Raman spectrum of compound 1

Table S1. 1D and 2D NMR of compound 1 recorded in CDCl₃.

Atom labeling	¹ H δ/ppm (J/Hz)	¹³ C δ/ppm	COSY	HMBC
C	1.34 – 1.45, m, 2H	28.84	H ^D	H ^A
D	1.61, p, <i>J</i> = 7.4 Hz, 2H	24.13	H ^C	H ^A H ^B H ^C
B	1.69, p, <i>J</i> = 7.4 Hz, 2H	30.56	H ^A	H ^A H ^D
E	2.31, t, <i>J</i> = 7.4 Hz, 2H	33.92	H ^D	H ^D H ^C
A	2.84, t, <i>J</i> = 7.4 Hz, 2H	29.66	H ^B	H ^B
G	10.71, br, 1H	180.13	-	H ^{D,E}

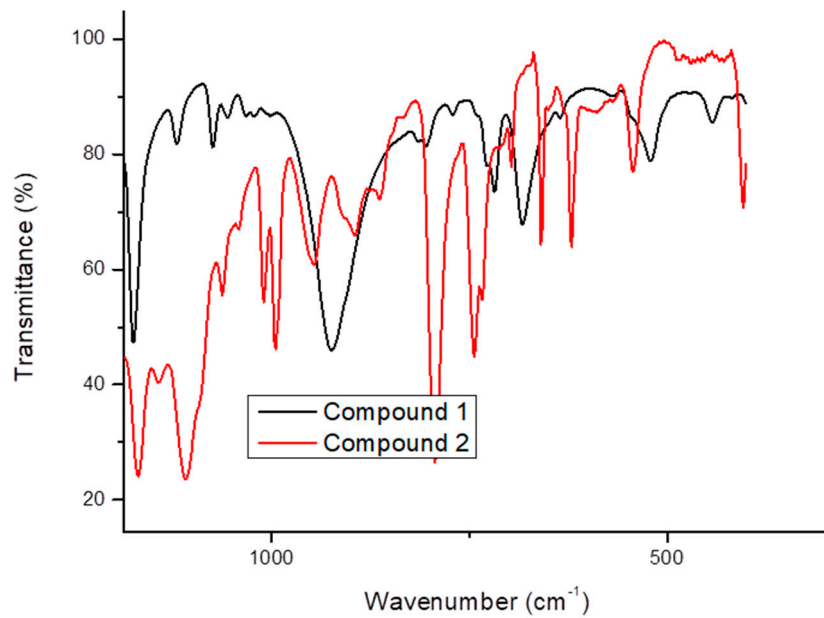


Figure S8. FT-IR spectrum of compound 2 plotted against compound 1

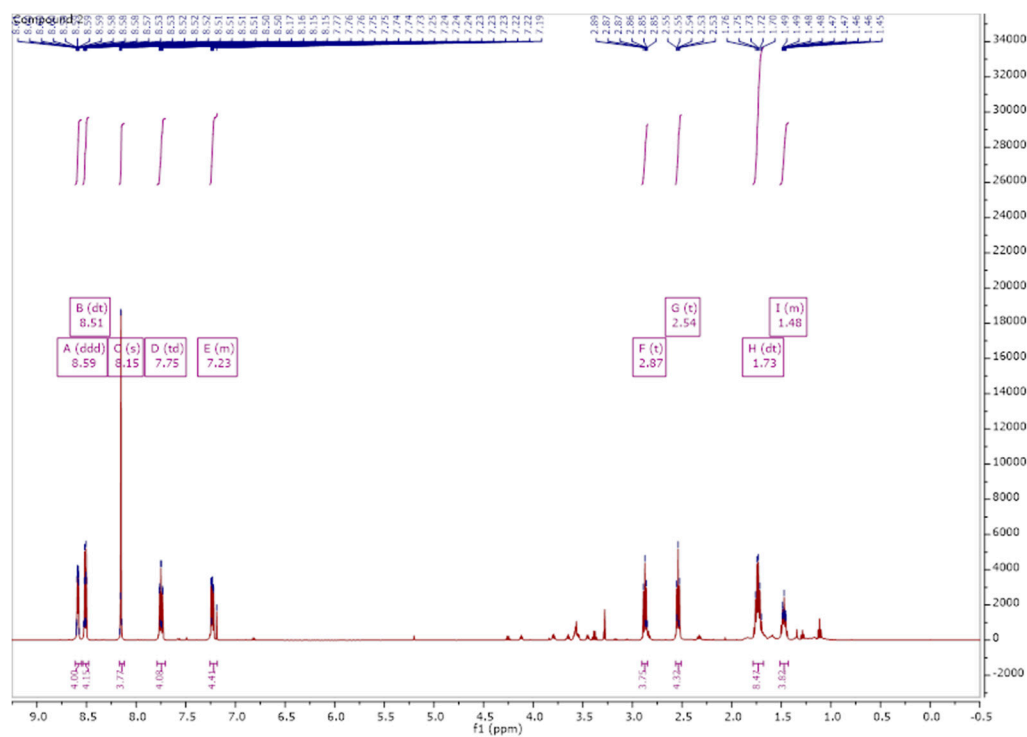


Figure S9. ^1H -NMR spectrum of compound 2 recorded in CDCl_3 .

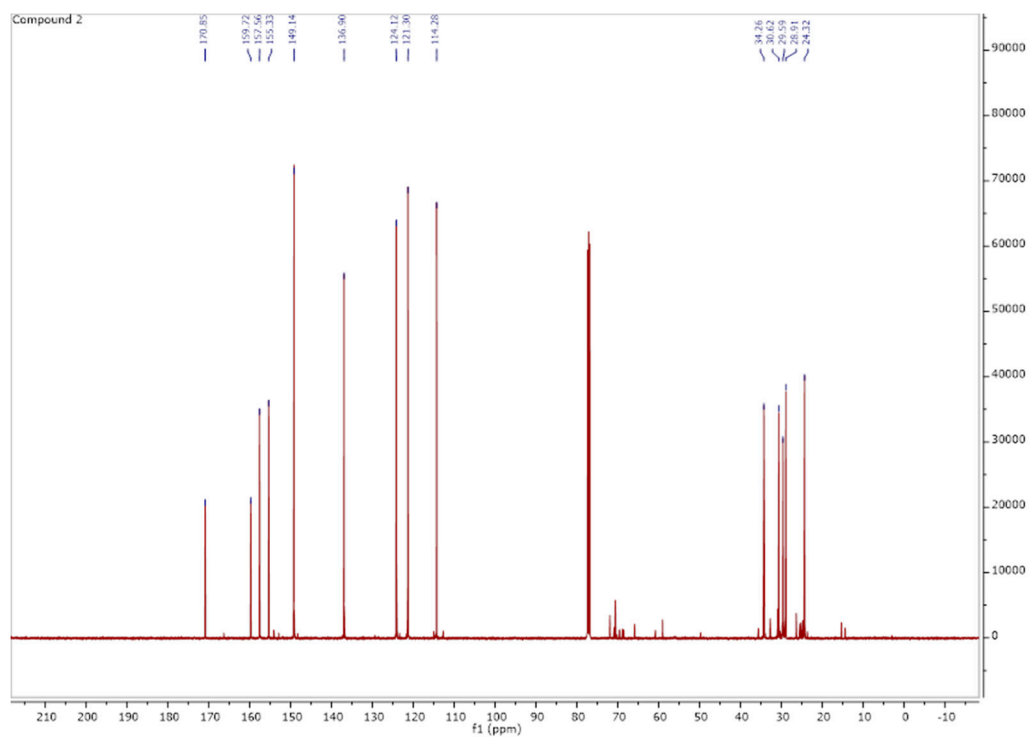


Figure S10. ^{13}C -NMR spectrum of compound 2 recorded in CDCl_3 .

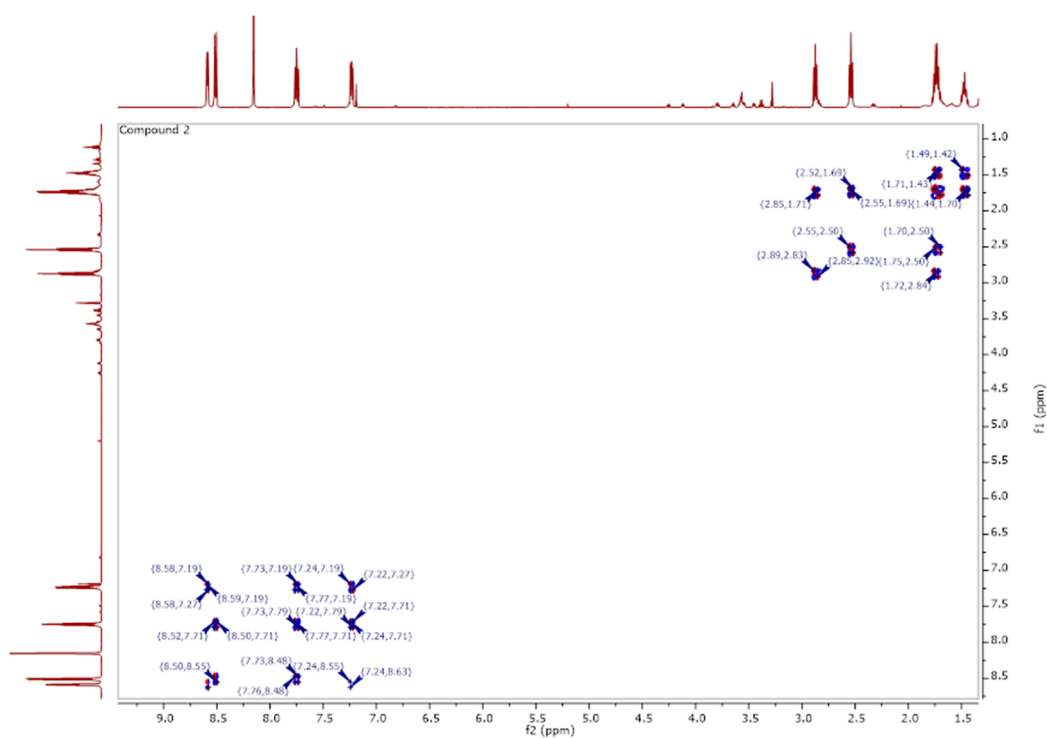


Figure S11. ^1H - ^1H (COSY) spectrum of compound 2

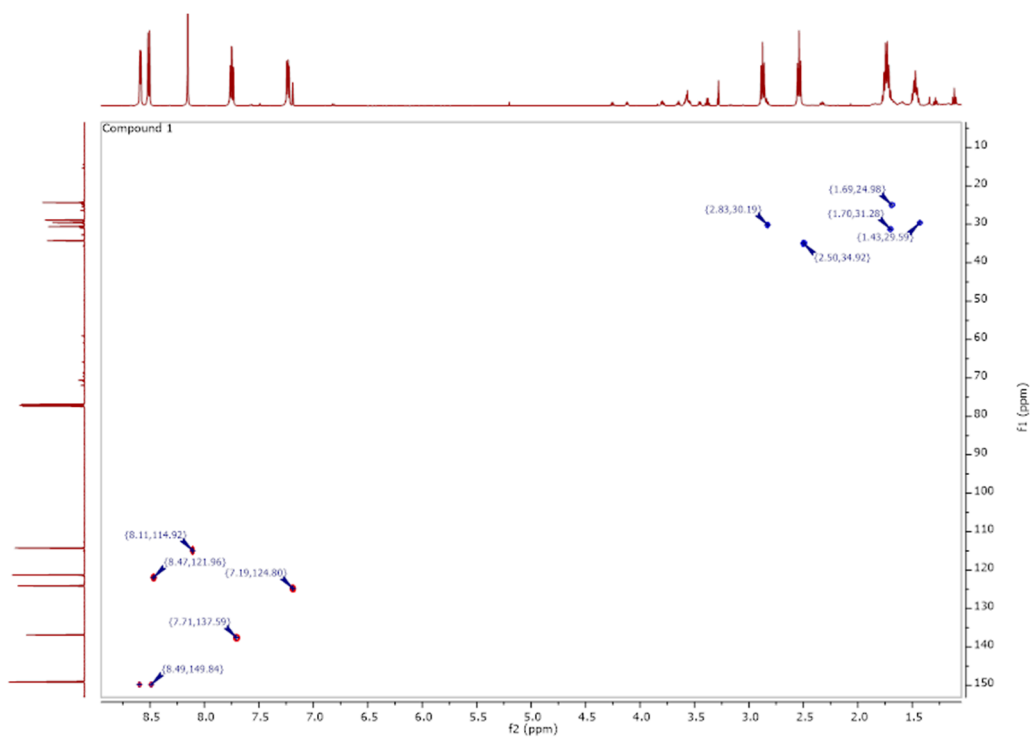


Figure S12. HSQC spectrum of compound 2

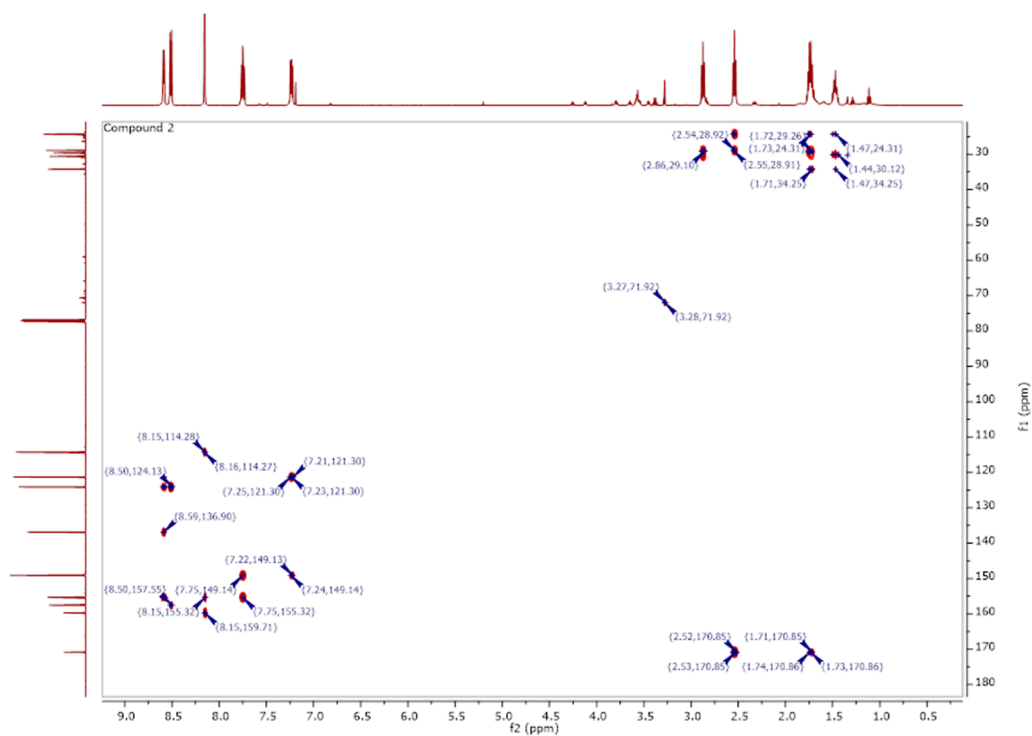


Figure S13. HMBC spectrum of compound 2

Table S2. 1D and 2D NMR assignment of compound 2 recorded in CDCl₃.

Atom labeling	¹ H	¹³ C	COSY	HMBC
C	1.39 – 1.54, m, 2H	28.91	H ^{B,D}	H ^{B,D}
D, B	1.74, q, <i>J</i> = 7.5 Hz, 4H	30.62, 24.32	H ^A , H ^C , H ^E	H ^{B,D}
E	2.54, t, <i>J</i> = 7.4 Hz, 2H	34.26	H ^{B,D}	H ^C
A	2.87, t, <i>J</i> = 7.4 Hz, 2H	29.59	H ^{B,D}	H ^C
2	7.23 t (ddd, <i>J</i> = 7.5, 4.7, 1.2 Hz, 2H)	124.12	H ¹ , H ³	H ¹ , H ⁴
3	7.75 t (td, <i>J</i> = 7.7, 1.8 Hz, 2H)	136.90	H ² , H ⁴	H ⁴
7	8.15 (s, 2H)	114.28	-	H ⁶
4	8.51 d (dt, <i>J</i> = 8.0, 1.1 Hz, 2H)	121.30	H ³	H ²
1	8.59 d (ddd, <i>J</i> = 4.7, 1.8, 0.9 Hz, 2H)	149.14	H ²	H ² , H ³
6	-	155.33	-	H ³ , H ⁴ , H ⁷
5	-	157.56	-	H ⁴
8	-	159.72	-	H ⁷
F	-	170.85	-	H ^E , H ^{B,D}